SELF-HELP

With Illustrations of Conduct and Perseverance

BY

SAMUEL SMILES, LL. D.

"This above all—To thine own self be true

And it must follow, as the night the day,

Thou canst not then be false to any man."

—Shakespeare.

ABRIDGED AND SIMPLIFIED

BY

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INTRODUCTORY NOTE

I have long thought that Self-Help would be a capital book for Indian boys and young men, if it were shortened and simplified, It has been a healthy stimulus to many an English lad, and there is no reason why, it should not be the same to the boys of Îndia. In an interesting way, and chiefly by examples from real life, it brings out the importance of such every day virtues as self-reliance, honesty, industry, perseverance and moral courage, and of such qualities as energy enterprise. These virtues and qualities are often regarded as very common-place; but it does not do to take them for granted, for they are the foundation of character and the essentials for success. The future of India will depend to a very great extent on the degree in which the young men of the present generation cultivate these virtues. In his preface to the edition of 1866, Dr. Smiles thus explains his purpose in writing Self-Help :- "The object of the book briefly is to re-inculcate these old-fashioned but wholesome lessons (which perhaps cannot be too often urged)—that youth must work in order to enjoy; that nothing creditable can be accomplished without application and diligence; that the student must not be daunted by difficulties, but conquer them by patience and perseverance; and that above all he must seek elevation of character, without which capacity is worthless and worldly success is nought." If the reading of this book inspires some Indian students with the healthy ambition to make something of their lives by their own efforts, it will have accomplished some good.

Some have criticised Self-Help as making too much of worldly success, and as implying that eminence in life is simply a matter

of hard-work and perseverance. Such criticisms, however, are unfair. Smiles emphatically places the formation of a noble character far above mere success, and more than once distinctly states that "without the inborn genius no amount of mere industry, however were applied, will make an artist." But after all it is worthwhile to try to be a success; and it is certainly true that industry and self-culture are necessary to develop such gifts as we have.

Samuel Smiles was the biographer of self-made men, and he was a self-made man himself. He was born in 1812 at Haddington, in Scotland. He received but little schooling, but worked hard at educating himself. When he was twenty-six he became editor of the Leeds Times, and seven years later he was appointed secretary of the Leeds and Thirsk Railway. In 1854 he became secretary of the South-Eastern Railway, which post he held until he retired in 1866, at the age of fifty-four. He did not stop working however when he retired, but he devoted himself to authorship, philanthropic and public work. Self-Help is his best known book, but he published many others, mostly biographies, such as George Stephenson, Industrial Biography, Men of Invention and Industry, Lives of the Engineers, Duty, Thrift and Conduct, etc.

Self-Help was first published in 1859, and at once became enormously popular. It ran through four editions in the year it saw the light, and since then it has been reprinted about sixty times by the original publisher (John Murray). There have also been many editions of the book in America, and it has been translated into various European languages.

This edition is, of course, abridged. Two chapters have been omitted, as they add little to the matter of the book, and the others have been shortened. But the main part of the book remains, and I do not think it has been materially injured by the pruning, as Smiles repeated himself a good deal, and gave many

illustrations where a few selected ones would have served the purpose. As far as possible I have left the language alone, only simplifying and compressing it where necessary. The notes are meant merely to enable the reader to identify the many characters mentioned in the book.

Islamia College, Peshawar., January, 5-1922.

H. MARTIN.

CONTENTS.

			P.	AGE.
Introductory Note	•••	•••	i-	—iii
Chap. I.—Self-help—N	fational and	Individual	•••	1
Chap. II.—Leaders of	Industry—I	nventors ar	d pro-	
ducers	•••	•••	•••	7
Chap. III.—Application	and Perse	everance—A	Great	
Potter	•••	•••	•••	18
Chap. IV.—Helps and	Opportunities	· · ·	•••	26
Chap. V.—Workers in	Art	•••	• • •	38
Chap. VI.—Energy and	l Courage	•••	•••	54
Chap. VII.—Men of B	usiness	•••	•••	72
Chap. VIII.—Money—	its use and a	buse	•••	83
Chap. IX.—Self-Cultur	:e	•••	•••	95
Chap. X.—Difficulties	•••	•••	•••	106
Chap. XI.—Character—	-The True G	entleman	•••	116
Notes	•••	•••	•••	121

SELF-HELP

CHAPTER I

SELF-HELP-NATIONAL AND INDIVIDUAL

- "The worth of a State, in the long run, is the worth of the individuals composing it."—J. S. Mill.
- "We put too much faith in systems, and look too little in men."-B. Disraeli.
- "Heaven helps those who help themselves" is a well-tried maxim, embodying the results of vast human experience. The spirit of self-help is the root of all genuine growth in the individual; and, exhibited in the lives of many, it is the true source of national vigour and strength. Help from without is often enfeebling in its effects, but help from within always invigorates. Whatever is done for men or classes, to a certain extent takes away the stimulus and necessity of doing for themselves; and where men are subjected to over-guidance and over-government, they tend to become comparatively helpless.

Even the best institutions can give a man no active help. Perhaps the utmost they can do is, to leave him free to develop himself and improve his individual condition. But in all times men have been prone to believe that their happiness and well-being were to be secured by means of institutions rather than by their own conduct. Hence the value of legislation as an agent in human advancement has always been greatly over-estimated. There is no power of law that can make the idle man industrious, the thriftless provident, or the drunken sober; though every man can be each and all of these if he will, by the exercise of his own free powers of action and self-denial. Indeed the worth and strength of a State depend far

less upon the form of its institutions than upon the character of its men.

It may not matter much how a man is governed from without, but everything depends upon how he governs himself from within. The greatest slave is not he who is ruled by a despot, but he who is the thrall of his own moral ignorance, selfishness, and vice. Nations who are enslaved at heart cannot be freed by any mere changes of masters or of institutions; and so long as the fatal delusion prevails that liberty solely depends upon government, so long will such changes, no matter at what cost they be made, have little practical and lasting result. The solid foundations of liberty must rest upon individual character: which is also the only sure guarantee for social security and national progress. In this consists the real strength of English liberty. Englishmen feel that they are free, not merely because they live under free institutions, but because each member of society has to a greater or less extent got the root of the matter within himself; and they continue to hold fast and enjoy their liberty, not by freedom of speech merely, but by their steadfast life and energetic action as free individual men.

All nations have been made what they are by the thinking and working of many generations: the action of even the least significant person having contributed towards the general result. Laborious and patient men of all ranks—cultivators of the soil and explorers of the mine—inventors and discoverers—tradesmen, mechanics and labourers—poets, thinkers, and politicians—all have worked together, one generation carrying forward the labours of another, building up the character of the country, and establishing its prosperity on solid foundations. This succession of noble workers—the artisans of civilization—has created order out of chaos, in industry, science, and art: and as our forefathers laboured for us, we must hand down to our successors the inheritance bequeathed to us, not only unimpaired, but improved.

This spirit of self-help, has in all times been a marked feature in the English character, and furnishes the true measure of our power as a nation. Rising above the heads of the mass there have always been individuals distinguished beyond others, who have commanded the public homage. But our progress has been owing also to multitudes of smaller and unknown men. Though only the generals'. names may be remembered in the history of any great campaign, it has been mainly through the individual valour of the privates that victories have been won. And life, too, is "a soldiers' battle," men in the ranks having in all times been amongst the greatest of workers. Many are the lives of men unwritten, which have nevertheless as powerfully influenced civilization and progress as the more fortunate Great whose names are recorded in biography. Even the humblest person, who sets before his fellows an example of industry, sobriety, and upright honesty of purpose in life, has a present as well as a future influence upon the well-being of his country; for his life and character pass unconsciously into the lives of others, and produce good example for all time to come.

Biographies of great, but especially of good men, are, nevertheless, most useful, as helps, guides, and incentives to others. Some of the best are almost like gospels—teaching high living, high thinking, and energetic action for their own and the world's good. British biography is full of illustrious examples of the power of self-help, of patient purpose, resolute working, and steadfast integrity, resulting in the formation of truly noble and manly character. They prove in language not to be misunderstood, what it is in the power of each to accomplish for himself; and they shew how self-respect and self-reliance enable men of even the humblest rank to work out for themselves an honourable living and a solid reputation.

It is this energy of individual life and example acting throughout society, which is the best practical education of

Englishmen. Schools, academies, and colleges give but the merest beginnings of culture in comparison with it. Far higher and more practical is the life-education daily given in our homes, in the streets, behind counters, in workshops, at the loom and the plough, in counting-houses and manufactories, and in all the busy haunts of men. This is the education that fits Englishmen for doing the work and acting the part of free men—a kind of education not to be learnt from books, or acquired by any amount of mere literary training. For a man perfects himself by work much more than by reading; it is life rather than literature, action rather than study, and character rather than biography, which perpetually renovate mankind.

It is this individual freedom and energy of action, that is really the source of our national growth. For it is not to one rank or class alone that this spirit of free action is confined, but it is found all ranks and classes. Perhaps its most vigorous outgrowths are in the commonest orders of the people.

Men great in science, literature, and art—apostles of great thoughts and lords of the great heart—have sprung from the English farm and the Scotch hillside, from the workshop and the mine, from the blacksmith's smithy and the cobbler's stool. The illustrations of this fact are indeed so numerous, that it is difficult to make a selection from them. Take for instance, the remarkable fact, that from the barber's shop rose Sir Richard Arkwright, the inventor of the spinning-jenny, and the founder of the cotton manufacture of Great Britain; Lord Tenterden, one of the most distinguished of English Lord Chief Justices; and Turner, the greatest among landscape painters.

The common class of day labourers has given us Brindley the engineer, Cook the navigator, and Burns the poet. Masons and bricklayers can boast of Ben Jonson, who worked at the building of Lincoln's Inn, with a trowel in his hand and a book in his pocket, Telford the engineer, and Hugh Miller the geologist; whilst among distinguished carpenters we find the names of Inigo Jones the architect. John Hunter the physiologist, Romney and Opie the painters. Professor Lee the orientalist, and John Gibson the sculptor.

From the weaver class have sprung Simpson the mathematician, Bacon the sculptor. Wilson the ornithologist, and Dr. Livingstone the missionary traveller. Shoemakers have given us Sir Cloudesley Shovel the great Admiral, Sturgeon the electrican, and William Carey the missionary.

Cardinal Wolsey, De Foe, and Kirke White were the sons of butchers, and Bunyan was a tinker. Among the great names connected with the invention of the steam-engine are those of Newcomen, Watt, and Stephenson; the first a blacksmith, the second a maker of mathematical instruments, and the third an engine-fireman.

Baffin the navigator began his sea-faring career as a man before the mast, and Sir Cloudesley Shovel as a cabin-boy. Herschel played the oboe in a military band. Chantrey was a journeyman carver, Etty a journeyman printer, and Sir Thomas Lawrence the son of a tavern-keeper. Michael Faraday, the son of a poor blacksmith, was in early life apprenticed to a bookbinder, and worked at that trade until he reached his twenty-second year.

Riches and ease, it is perfectly clear, are not necessary for man's highest culture, otherwise the world would not have been so largely indebted in all times to those who have sprung from the humbler ranks. An easy and luxurious existence does not train men to effort. Indeed, so far from poverty being a misfortune, it may, by vigorous self-help, be converted even into a blessing; rousing a man to that struggle with the world in which the right-minded and true-hearted will find strength, confidence, and triumph.

Human character is moulded by a thousand subtle influences: by example and precept; by life and literature; by friends and neighbours; by the world we live in, as well as by the spirits of our forefathers. But great as these influences are, it is nevertheless equally clear that men must be the active agents of their own well-being and well-doing; and that, however much the wise and the good may owe to others, they themselves must be their own best helpers.

CHAPTER II

LEADERS OF INDUSTRY-INVENTORS AND PRODUCERS

"Deduct all that men of the humbler classes have done for England in the way of inventions only, and see when she would have been but for them."—Arthur Helps.

One of the most strongly marked features of the English people is their spirit of industry, as characteristic of them now as at any former period. It is this spirit, displayed by the commons of England, which has laid the foundations and built up the industrial greatness of the empire.

The career of industry which the nation has pursued, has also proved its best education. As steady application to work is the healthiest training for every individual, so is it the best discipline of a state. Honourable industry always travels the same road with enjoyment and duty; and progress is altogether impossible without it. Labour is not only a necessity and a duty, but a blessing: only the idler feels it to be a curse. In the school of labour is taught the best practical wisdom; and a life of manual employment can go along with higher culture.

The great names we have already mentioned show that the difficulties connected with poverty and labour can be overcome. The greater part of the notable inventions that have brought so much wealth and power to the nation have been due to men of the humblest rank. Inventors have set in motion some of the greatest industries in the world. Our food, our clothing, the furniture of our homes, the glass that admits light to our dwellings and at the same time excludes the cold, the gas which illuminates our streets, our means of

locomotion by land and sea, the tools by which our various articles of necessity and luxury are made, have been the result of the labour and ingenuity of many men and many minds.

James Watt.

Though the invention of the working steam-engine—the king of machines-belongs to our own epoch, the idea of it was born many centuries ago. Like other contrivances and discoveries, it was effected step by step-one man passing on the result of his labours, at the time apparently useless, to his successors, who took it up and carried it forward another The steam-engine was nothing, however, until it emerged from the state of theory, and was taken in hand by practical mechanics; and what a noble story of patient, laborious investigation, of difficulties overcome by heroic industry, does that marvellous machine tell of! It is, indeed, in itself, a monument of the power of self-help in man. Grouped around it we find Savary, the Cornish miner; Newcomen, the Dartmouth blacksmith; Cawley, the glazier; Potter, the engineboy; Smeaton, the engineer; and, towering above all, the laborious, patient, never-tiring James Watt, the mathematical instrument maker.

Watt was one of the most industrious of men. Whatever subject came under his notice in the course of his business, immediately became to him an object of study; and the story of his life proves that it is not the man of the greatest natural vigour and capacity who achieves the highest results, but he who employs his powers with the greatest industry and the most carefully disciplined skill—the skill that comes by labour, application, and experience. Many men in his time knew far more than Watt, but none laboured so earnestly as he did to turn all that he did know to useful practical purposes. He was, above all things, most persevering in his pursuit of facts. He cultivated carefully that habit of active

attention on which all the higher working qualities of the mind mainly depend.

Even when a boy, Watt found science in his toys. The quadrants lying about his father's carpenter's shop led him to the study of optics and astronomy; his ill-health induced him to pry into the secrets of physiology; and his solitary walks through the country attracted him to the study of botany, history, and antiquarianism. While carrying on the business of a mathematical instrument maker, he received an order to build an organ; and, though without any ear for music, he undertook the study of harmonies, and successfully made the instrument. And, in like manner, when the little model of Newcomen's steam-engine, belonging to the University of Glasgow, was placed in his hands for repair, he forthwith set himself to learn all that was then known about heat, evaporation, and condensation—at the same time plodding his way in mechanics and the science of construction—the result of which was at length his invention of the condensing steam-engine.

For ten years he went on contriving and inventing—with little hope to cheer him-with few friends to encourage him -struggling with difficulties, and earning but a slender living at his trade. Even when he had brought his engine into a working condition, his difficulties seemed to be as far from an end as ever; and he could find no capitalist to join him in his great undertaking, and bring the invention to a successful practical issue. He went on, meanwhile, earning bread for his family by making and selling quadrants, making and mending fiddles, flutes, and other musical instruments; measuring mason work, surveying roads, superintending the construction of canals, or doing anything that turned up. At length, Watt found a fit partner in another eminent leader of industry—Matthew Boulton, of Birmingham; a skilful, energetic, and far-seeing man, who vigorously undertook the enterprise of introducing the condensing engine into general

use as a working power; and the success of both is now matter of history.

A succession of eminent workmen have, from time to time, added new power to the steam-engine; and, by many modifications, made it capable of being applied to nearly all the purposes of manufacture—driving machinery, impelling ships, grinding corn, printing books, stamping money, hammering, planing, and turning iron; in short, of performing any kind of mechanical labour where power is required. One of the most useful modifications in the engine was that devised by Trevithick, another Cornish miner, and eventually perfected by George Stephenson, the colliery engine-man, in the invention of the railway locomotive, by which social changes of immense importance have been brought about, of even greatar consequence to human progress and civilization, than the condensing-engine of Watt. These successive advances, however, have not been the result of the genius of any one inventor; but of the continuous industry and inventiveness of many generations. What Mr. Robert Stephenson said of the locomotive, at a meeting of engineers at Newcastle, is true of nearly every other capital invention: "It is due," he said, "not to one man, but to the efforts of a nation of mechanical engineers."

Richard Arkwright.

One of the first grand results of Watt's invention was the establishment of the cotton manufacture of Great Britain. The person most closely connected with the foundation of this great branch of industry was Sir Richard Arkwright, whose practical energy and sagacity were perhaps even more remarkable than his mechanical inventiveness. His originality as an inventor has indeed been called in question, like that of Watt and Stephenson. Arkwright probably stood in the same relation to the spinning-machine that Watt did to the steam-engine, and Stephenson to the locomotive. He gathered

together the scattered threads of ingenuity which already existed, and wove them, after his own design, into a new and original fabric.

Richard Arkwright, like most of our great mechanicians, sprang from the ranks. He was born in Preston in 1732. His parents were very poor, and he was the youngest of thirteen children. He was never at school; the only education he received he gave to himself; and to the last he was only able to write with difficulty. When a boy, he was apprenticed to a barber, and after learning the business, he set up for himself in Bolton in 1760, occupying an underground cellar, over which he put up the sign, "Come to the subterraneous barber—he shaves for a penny." The other barbers found their customers leaving them, and reduced their prices to his standard: when Arkwright announced his determination to give "A clean shave for a halfpenny." After a few years he quitted his cellar, and became a travelling dealer in hair. At that time wigs were worn, and this was an important branch of the barber's business. He went about buying hair, and was accustomed to attend the hiring fairs throughout Lancashire resorted to by young women, for the purpose of securing their long tresses; and it is said that in negotiations of this sort he was very success-He also dealt in a chemical hair-dye, and thereby secured a considerable trade. Being of a mechanical turn, he devoted a good deal of his spare time to contriving models of machines, and, like many self-taught men of the same bias, he tried to invent perpetual motion. He followed his experiments so devotedly that he neglected his business, lost the little money he had saved, and was reduced to great poverty. His wife-for he had by this time married-was impatient at what she thought to be a wanton waste of time and money, and in a moment of sudden wrath she destroyed his models, hoping thus to remove the cause of the family privations. Arkwright was a stubborn and enthusiastic man, and he was provoked beyond measure by this conduct of his wife, which he never forgave; and he, in consequence, separated from her.

In travelling about the country, Arkwright had become acquainted with a person named Kay, a clockmaker at Warrington, who helped him in making some of the parts of his perpetual-motion machinery. It is supposed that he was first informed by Kay of the principle of spinning by rollers. The idea at once took firm possession of his mind, and he proceeded to devise the process by which it was to be accomplished, Kay being able to tell him nothing on this point. Arkwright now abandoned his business of hair collecting, and devoted himself to the perfecting of his machine, a model of which, constructed by Kay under his directions, he set up in the parlour of the Free Grammar School at Preston. The exhibition of his machine in a town where so many work-people lived by manual labour proved a dangerous experiment; there were ominous growlings heard outside from time to time, and Arkwrightremembering the fate of poor Hargreaves' spinning-jenny, which had been pulled to pieces only a short time before by a Blackburn mob,—wisely determined on packing up his model and removing to a less dangerous place. He went accordingly to Nottingham, where he applied to some of the local bankers for financial help; and the Messrs. Wright consented to advance him a sum of money on condition of sharing in the profits of the invention. The machine, however, not being perfected so soon as they had hoped, the bankers recommended Arkwright to apply to Messrs. Strutt and Need, the former of whom was the ingenious inventor and patentee of the stocking-frame. Mr. Strutt was quick to see the merits of the invention, and a partnership was entered into with Arkwright, whose road to fortune was now clear. The patent was secured in the mane of "Richard Arkwright, of Nottingham, clockmaker," and it is a remarkable fact, that it was taken out in 1769, the very same year in which Watt secured the patent for his steam-engine. A cotton-mill was first erected at Nottingham, driven by horses; and another was shortly after built, on a much larger scale, at Cromford, in Derbyshire, turned by a water-wheel, from which the

spinning-machine came to be called the water-frame.

Arkwright's labours, however, were comparatively speaking, only begun. He had still to perfect all the working details of his machine. It was in his hands the subject of constant improvement, until at last it was rendered practicable and profitable in an eminent degree. But success was only secured by long and patient labour: for some years, indeed, the speculation was disheartening and unprofitable, swallowing up a vary large amount of capital without any result. When success began to appear more certain, then the Lancashire manufacturers fell upon Arkwright's patent to pull it in pieces, as the Cornish miners fell upon Boulton and Watt to rob them of the profits of their steam-engine. Arkwright was even denounced as the enemy of the working people; and a mill which he built near Chorley was destroyed by a mob in the presence of a strong force of police and military. The Lancashire men refused to buy his materials, though they were the best in the market. Then they refused to pay patent-right for the use of his machines, and combined to crush him in the To the disgust of right-minded people, courts of law. Arkwright's patent was upset. But though beaten, he was not subdued. He established large mills in other parts of Lancashire, in Derbyshire, and at New Lanark, in Scotland. The mills at Cromford also came into his own hands at the expiring of his partnership with Strutt, and the amount and the excellence of his products were such, that in a short time he obtained complete a control of the trade.

Arkwright was a tremendous worker, and a man of marvellous energy, ardour, and application in business. At one period of his life he was usually engaged in the severe labour involved by the organization and conduct of his numerous manufactories from four in the morning until nine at night. At fifty years of age he set to work to learn English grammar, and improve himself in writing and spelling. When he travelled to save time he went at great speed, drawn by four horses. Be it for good or for evil, Arkwright was the founder in England of the modern factory system, a branch of industry which has proved a source of immense wealth to individuals and to the nation.

Josiah Wedgewood.

That the force and development of a country depends; mainly upon the industry and energy of its individual men cannot be better illustrated than by the career of another distinguished workman, Josiah Wedgwood, the founder of the Staffordshire Potteries. His father was a poor potter at Burslem, barely able to make a living at his trade. He died when Josiah was only eleven years old, and at that early age he began to work as a thrower at his elder brother's wheel. The boy never received any school education worthy of the name, and all the culture which he afterwards received, he obtained for himself. About the time when the boy began to work at the potter's wheel, the maunfacture of earthenware could scarcely be said to exist in England. What was produced was altogether unequal to the supply of our domestic wants, and large quantities of the commoner sort of ware were imported from abroad—principally from Delft, in Holland, whence it was usually known by the name of "Delft ware." Porcelain for the rich was chiefly imported from China, and sold at a very high price. No porcelain capable of resisting a scratch with a hard point had as yet been made in this country. The articles of earthenware produced in Staffordshire were of the coarsest quality, and were for the most part hawked

about by the workmen themselves and their families, or by pedlers, who carried their stocks upon their backs.

Whilst working with his brother as a thrower, Wedgewood caught the small-pox, then a most malignant disease; he was thrown into ill-health, and the remains of the disease seem to have settled in his left leg, so that he was obliged to have it amputated, which compelled him to give up the potter's wheel. Sometime after this we find him at Stoke, in partnership with a man named Harrison, as poor as himself-in fact both were as yet but common workmen. Wedgewood's taste for ornamental pottery, however, already began to show itself; and, leaving Harrison, he joined himself to another workman named Whieldon, making earthenware knife handles inimitation of agate and tortoise-shell, melon table-plates, green pickleleaves, and such articles. As Whieldon was unwilling to pursue this fanciful branch of trade, Wedgewood left him and returned to Burslem, where he set up for himself in a small thatched-house, and went on with the making of his articles of taste. He worked away industriously, employed a few hands under him, and gradually prospered. He was a close inquirer and an accurate observer in his special line of business; and among other facts which came under his notice, was this important one—that an earth containing silica, which was black before calcination, became white after exposure to the heat of a furnace. This fact, observed and pondered over, led to the idea of mixing silica with the red powder of the potteries, and to the discovery that the mixture becomes white when calcined. He had but to cover this material with a transparent glaze, to obtain one of the most important products of fictile art—that which, under the name of English earthenware, was to attain the greatest commercial value, and to become of the greatest utility.

Wedgewood now took new premises, and began to manufacture white stone-ware on a large scale, and afterwards cream-coloured ware, which became very famous. The improvement of

pottery became his passion, and was never lost sight of for a Whatever he undertook to do he worked at with all his might. He now devoted himself to patient chemical investigation, and as his means increased, he spared neither labour nor expense in pursuing his improvements. He sought the society of men of science, art, and learning; and learnt something valuable from them all. Even when he had become rich he went forward perfecting his manufacture, until the industry of the entire district was stimulated, and a great branch of British industry was at last established on firm foundations. He was assisted in his objects by persons of rank and influence; and he made for Queen Charlotte the first royal table-service of English manufacture, of the kind afterwards called "Queen's-ware," and was forthwith appointed her Royal Potter, a title which Wedgewood more prized than if he had been Valuable sets of porcelain were entrusted created a baron. to him for imitation, in which he succeeded to admiration. Sir William Hamilton lent him specimens of ancient art from Herculaneum, of which Wedgewood's ingenious workmen produced the most accurate and beautiful copies.

Wedgewood called to his aid the crucible of the chemist, the knowledge of the antiquary, and the skill of the artist. He found out Flaxman when a youth, and while he liberally nurtured his genius drew from him a large number of beautiful designs for his pottery and porcelain; converting them by his manufacture into objects of taste and excellence. By careful experiment and study he was even enabled to rediscover the art of painting on porcelain or earthenware vases and similar articles—an art practised by the ancient Etruscans, but which had been lost. He distinguished himself by his own contributions to science, and his name is still identified with the pyrometer which he invented. He was a tireless supporter of all measures of public utility; and the construction of the Trent and Mersey Canal was mainly due to his public-spirited exertions allied to the engineering skill of Brindley. The

roads of the district being very bad, he planned and executed a turnpike-road through the Potteries, ten miles in length. The reputation he achieved was such that his works at Burslem, and subsequently those at Etruria, which he founded and built, became an attraction to distinguished visitors from all parts of Europe.

The result of Wedgewood's labours was, that the manufacture of pottery, which he found in the very lowest condition, became one of the staples of England; and instead of importing what we needed for home use from abroad, we became large exporters to other countries. Wedgewood gave evidence as to his manufactures before Parliament in 1785, only some thirty years after he had begun his work. He showed that, from providing only casual employment to a small number of inefficient and badly paid-workmen, the manufacture of earthenware then gave employment to about 20,000 persons. Yet, important as had been the advances made in his time, Mr. Wedgewood was of opinion that the manufacture was but in its infancy. An opinion which has been fully borne out by the progress which has since been made in this important branch of industry.

Men such as these are fairly entitled to rank among the heroes of England. Their patient self-reliance amidst trials and difficulties, their courage and perseverance in the pursuit of worthy aims, are no less heroic of their kind than the bravery and devotion of the soldier and the sailor, whose duty it is heroically to defend what these valiant leaders of industry, have as heroically achieved.

CHAPTER III

Application and Perseverance.—A Great Potter

"Patience is the finest and worthiest part of fortitude, and the rarest too. Patience lies at the root of all pleasures, as well as of powers. Hope herself ceases to be happiness when impatience companions her."—John Ruskin.

The story of Bernard Palissy, the French potter of the 16th century, furnishes one of the most remarkable instances of patient perseverance to be found in the whole range of biography.

Bernard Palissy is supposed to have been born in the south of France about the year 1510. His father was probably a worker in glass, to which trade Bernard was brought up. His parents were poor people—too poor to give him any school education. "I had no other books," he said afterwards, "than heaven and earth, which are open to all." He learnt, however, the art of glass-painting, and later reading and writing.

When about eighteen years of age, Palissy left his father's house, as the glass trade was declining, and went out into the world to search for work. He first travelled towards Gascony, working at his trade where he could find employment, and sometimes doing some land-measuring. Then he travelled northwards, living for a time at various places in France, Flanders, and Lower Germany.

In this way Palissy occupied himself for about ten more years of his life, after which he married, and settled down to glass-painting and land-measuring in the small town of Saintes, in the Lower Charente. There children were born to him, and he found his earnings were too small to meet his increased expenses. He therefore turned his attention to the art of painting and enamelling earthenware, which, if he could master it, would pay him better than his own trade. But of this art he was wholly ignorant; for he had never seen earth baked before he began his experiments. He had therefore to learn everything for himself, without anyone to help him. But he was full of hope, eager to learn, of unbounded perseverance and inexhaustible patience.

At that time coarse brown jars were almost the only articles of earthenware produced in France. In the preceding century, the Florentine sculptor, Luca della Robbia, had re-discovered the best art of painting and enamelling earthenware, which was known to the ancient Etruscans, and also to the Moors in the island of Majorca in the eleventh century. Luca's work became famous throughout Europe, and many specimens found their way to France and Spain, where they were greatly prized. It was the sight of a beautiful cup of Italian manufacture—most probably one of Luca della Robbia's make—which first set Palissy thinking about the new art. The sight of this cup disturbed his whole existence; and the determination to discover the enamel with which it was glazed, thenceforth possessed him like a passion. If he had been a single man, he might have travelled into Italy in search of the secret; but he was bound to his wife and children, and could not leave them. So he remained by their side, groping in the dark to find out the process of making and enamelling earthenware.

At first he could only guess the materials of which the enamel was made; and he tried all kinds of experiments to discover what they really were. He pounded all the substances which he supposed were likely to produce it. Then he bought common earthen-pots, broke them into pieces, and, spreading his compounds over them, heated them in a furnace he had himself made. His experiments failed: the only results were broken pots and a waste of fuel, drugs, time and labour. Women do

not readily sympathise with experiments which seem to do nothing but swallow up the money necessary for buying clothes and food for their children; and Palissy's wife opposed the purchase of more earthen-pots which seemed to her to be bought only to be broken. Yet she had to submit; for he was determined to master the secret of the enamel, and would not leave it alone.

For many months and years Palissy went on with his experiments. The first furnace having proved a failure, he built another out of doors. In it he burnt more wood, spoiled more pots and chemicals, and lost more time, until poverty stared him and his family in the face. "Thus," said he, "I fooled away several years, with sorrow and sighs, because I could not at all arrive at my intention." Between his experiments he worked at his former callings, painting on glass, drawing portraits and measuring land : but his earnings were very small. At length he was no longer able to carry on his experiments in his own furnace because of the heavy cost of fuel; but he bought more pots, broke them up as before into three or four hundred pieces, and, covering them with chemicals. carried them to a tile factory, four and a half miles from Saintes, there to bake them in an ordinary furnace. But when the pieces were taken out, he found to his dismay the whole of these experiments were failures. But, though disappointed, he was not defeated; for he made up his mind on the very spot to begin afresh.

His business as land measurer called him away for sometime to make a survey of the salt-marshes near Saintes for the Government; but when that work was finished he proceeded, with greater zeal than ever, to follow up his experiments "in the track of enamels." He began by breaking three dozen new earthen-pots and covering the pieces with different materials which he had compounded, and then took them to a neighbouring glass-furnace to be baked. The results gave him a glimmer of hope. The greater heat of the

glass-furnace had melted some of the compounds; but though Palissy searched diligently for the white enamel he could find none.

For two more years he went on experimenting without any satisfactory result, until all he had earned by his survey of the salt-marshes was spent, and he was again reduced to poverty. But he resolved to make a last great effort; and he began by breaking more pots than ever. More than three hundred pieces of pottery were covered with his compounds, and were sent to the glass-furnace; and thither he himself went to watch the results of the baking. Four hours passed, and then the furnace was opened. The material on only one of the three hundred pieces of potsherd had melted, and it was taken out to cool. As it hardened, it became white-white and polished! The piece of potsherd was covered with white enamel, described by Palissy as "singularly beautiful!" And beautiful it must no doubt have been after all his weary waiting. He ran home with it to his wife, feeling himself, as he expressed it, quite a new creature. But the prize was not won vet—far from it. The partial success of this effort merely lured him on to further experiments and failures.

In order to carry on his work in secret, he now built for himself a glass-furnace near his house, carrying the bricks for it from the brick-field on his own back. He was bricklayer, labourer and all. After seven or eight months the furnace was built and ready for use. Palissy had in the meantime made a number of vessels of clay in readiness for the laying on of the enamel. After being baked, they were covered with the enamel compound, and again placed in the furnace. Although his money was nearly finished, Palissy had managed to collect a great store of fuel for the final effort; and he thought it was enough. At last the fire was lit. All day Palissy sat by the furnace, feeding it with fuel. He sat there watching the fire all through the night. But the enamel did not melt. The sun rose upon his labours. His

wife brought him his scanty morning meal—for he could not stir from the furnace, into which he continued from time to time to throw more fuel. The second day passed, and still the enamel did not melt. The sun set, and another night passed. The pale haggard, unshaved baffled but not yet beaten Palissy, sat by his furnace eagerly looking for the melting of the enamel. A third day and night passed—a fourth, a fifth, and even a sixth—yes, for six long days and nights did the unconquerable Palissy watch and toil, hoping against hope, and still the enamel could not melt.

Two or three weeks after Palissy, having borrowed some money and bought more pots, prepared for a final attempt. It was the last and most desperate experiment of all. fire blazed up; the heat became intense; but still the enamel did not melt. The fuel began to run short! How to keep up the fire? There were the garden palings: these would burn. They must be sacrificed rather than the great experiment should fail. The garden palings were pulled up and cast into the furnace. They were burnt in vain! The enamel had not yet melted. Ten minutes' more heat might do it. Fuel must be had at any cost. There remained the house-hold furniture and shelves. A crashing noise was heard in the house; and, amidst the screams of his wife and children, who now feared Palissy's reason was giving way, the tables were broken up and thrown into the furnace. enamel had not melted yet! There remained the shelves. Another noise of the wrenching of timber was heard within the house, and the shelves were torn down and hurled after the furniture into the fire. Wife and children then rushed from the house and ran frantically through the town, calling out that poor Palissy had gone mad and was breaking up his very furniture for firewood!

For an entire month his shirt had not been off his back, and he was utterly worn out—wasted with toil, anxiety, watching and want of food. He was in debt, and seemed on

the verge of ruin. But he had at length mastered the secret; for the last great burst of heat had melted the enamel. The common brown household pots, when taken out of the furnace after it had became cool, were found covered with a white glaze! For this he could endure reproach and scorn, and wait patiently for the chance of putting his discovery into practice as better days came round.

But, though he had already spent nearly ten years in the search for the enamel, it cost him nearly eight more years of hard work before he perfected his invention. He was very poor, and his family continued to reproach him for his recklessness, and his neighbours cried shame upon him for his obstinate folly. At one time he became almost hopeless, and seems to have all but broken down. He wandered gloomily about the fields near Saintes, his clothes hanging in tatters, and himself worn to a skeleton. Still he struggled on. He gradually learnt dexterity and certainty of result by experience, gathering practical knowledge about the nature of enamels, the qualities and tempering of clays, and the making and management of furnaces.

At last, after nearly sixteen years' labour, Palissy took heart and called himself potter. He was now able to sell his ware and so keep his family in comfort. But he never rested satisfied with what he had accomplished. He proceeded from one improvement to another, always aiming at the greatest perfection possible. He studied natural objects for patterns, and with such success that the great naturalist, Buffon, spoke of him as "so great a naturalist as Nature only can produce." His ornamental pieces are now looked upon as rare gems in the cabinets of collectors, and sell at almost fabulous prices. The ornaments on them are, for the most part, accurate models from life of wild animals, lizards, and plants, found in the fields about Saintes.

We have not, however, come to the end of the sufferings of Palissy. Being a Protestant, at a time when religious

persecution waxed hot in the south of France, and expressing his opinions without fear, he was regarded as a dangerous heretic, and was at last arrested and put in prison at Bordeaux. He was condemned to be burnt; but a powerful nobleman, the Constable de Montmorency, saved his life—not because he had any sympathy with his religious opinions, but because there was no other artist who could make the enamelled pavement for his splendid palace which was then being built at Ecoven, about twelve miles from Paris. By the influence of this nobleman he was appointed Royal Potter, and he went to live in Paris. While he was occupied in carrying out the orders of the Constable, and of the Queen-Mother, Catherine de Medici, he was lodged in the Tuileries, the royal palace.

During the latter part of his life, Palissy wrote and published several books on the potter's art. He also wrote on agriculture, on fortification, and on natural history. He waged war, too, against astrology, alchemy, witchcraft, and like impostures. This raised up against him many enemies, who accused him of heresy, and he was again arrested for his religion and imprisoned in the Bastille in 1588. He was now an old man of seventy-eight, but his spirit was as brave as He was threatened with death if he did not give up his religion; but he was as obstinate in holding to his religion as he had been in hunting out the secret of the enamel. King, Henry III, even went to see him in prison to persuade him to give up his faith. "My good man," said the King, "You have now served my mother and myself for many years. We have put up with your holding to your religion amidst fires and massacres. Now I am so pressed by the Guise party as well as by my own people that I am constrained to leave you in the hands of your enemies, and to-morrow you will be burnt unless you become a Catholic." "Sire." answered the unconquerable old man, "I am ready to give up my life for the glory of God. You have said many times that you have pity on me; and now I have pity on you, because you say I am constrained! That is not spoken like a king, Sire; "it is what you, and those who constrain you, can never do to me, for I know how to die." Palissy did indeed die soon after, a martyr, though not at the stake. He died in the Bastille, after about a year's imprisonment—there peacefully ending a life distinguished for heroic labour; wonderful endurance, and inflexible rectitude.

CHAPTER IV

HELPS AND OPPORTUNITIES

"Opportunity has hair in front, behind she is bald; if you seize her by the forelock you may hold her, but, if she is suffered to escape, not Jupiter himself can catch her again."—From the Latin.

ACCIDENT does very little towards the production of any great result in life. Though sometimes what is called "a happy hit" may be made by a bold venture, the old and common highway of steady industry is the only safe road to travel.

Sedulous attention and painstaking industry always mark the true worker. The greatest men are not those who "despise the day of small things," but those who improve them the most carefully. Michael Angelo was one day explaining to a visitor at his studio, what he had been doing at a statue since his previous visit. "I have retouched this part polished that—softened this feature—brought out that muscle—given some expression to this lip, and more energy to that limb." "But these are trifles," remarked the visitor. "It may be so," replied the sculptor, "but recollect that trifles make perfection, and perfection is no trifle." So it was said of Nicholas Poussin, the painter, that the rule of his conduct was, that "whatever was worth doing at all was worth doing well;" and when asked, late in life, by what means he had gained so high a reputation among the painters of Italy, Poussin emphatically answered, "Because I have neglected nothing."

Although there are discoveries which are said to have been made by accident, it will be found that there has really been very little that was accidental about them. For

the most part, these so-called accidents have only been opportunities, carefully improved by genius. The fall of the apple at Newton's feet has often been quoted in proof of the accidental character of some discoveries. But Newton's whole mind had already been devoted for years to the patient investigation of the subject of gravitation; and the circumstance of the apple falling before his eyes simply served to flash upon him the brilliant discovery then bursting his sight. In like manner, the brilliantly-coloured soapbubbles blown from a common tobacco-pipe—though "trifles light as air" in most eyes—suggested to Dr. Young his beautiful theory of "interferences," and led to his discovery relating to the diffraction of light. Although great men are popularly supposed only to deal with great things, men such as Newton and Young were ready to detect the significance of the most familiar and simple facts; their greatness consisting mainly in their wise interpretation of them.

The difference between men consists, in a great measure, in the intelligence of their observation. The Russian proverb says of the non-observant man, "He goes through the forest and sees no firewood." "The wise man's eyes are in his head," says Solomon, "but the fool walketh in darkness." "Sir," said Johnson, on one occasion, to a fine gentleman just returned from Italy, "some men will learn more in the Hampstead stage-coach than others in the tour of Europe." It is the mind that sees as well as the eye. Where unthinking gazers observe nothing, men of intelligent vision see much, attentively nothing differences, making comparisons, and detecting their underlying idea. Many, before Galileo, had seen a suspended weight swing before their eyes with a measured beat; but he was the first to discover the value of the fact. One of the vergers in the cathedral at Pisa, after filling with oil a lamp which hung from the roof, left it swinging to and fro; and Galileo, then a youth of only eighteen noting it attentively, conceived the idea of applying it to the

measurement of time. Fifty years of study and labour, however, elapsed, before he completed the invention of his Pendulum—an invention the importance of which, in the measurement of time and in astronomical calculations, can scarcely be overvalued. In like manner, Galileo, having casually heard that one Lippershey, a Dutch spectacle-maker, had presented to Count Maurice of Nassau an instrument by means of which distant objects appeared near to the beholder, tried to find out the cause, which led to the invention of the telescope, and thus proved the beginning of important astronomical discoveries. Discoveries such as these could never have been made by a negligent observer, or by a mere passive listener.

While Captain (afterwards Sir Samuel) Brown was studying the construction of bridges, with the view of contriving one of a cheap description to be thrown across the Tweed, near which he lived, he was walking in his garden one dewy autumn morning, when he saw a tiny spider's web suspended across his path. The idea immediately occurred to him, that a bridge of iron ropes or chains might be constructed in like manner, and the result was the invention of his Suspension Bridge. So James Watt, when consulted about the mode of carrying water by pipes under the Clyde, along the unequal bed of the river, turned his attention one day to the shell of a lobster presented at table; and from that model he invented an iron tube, which, when laid down, was found to answer the purpose. Sir Isambert Brunel took his first lessons in forming the Thames Tunnel from the tiny shipworm: he saw how the little creature perforated the wood with its well-armed head, first in one direction and then in another, till the archway was complete, and then daubed over the roof and sides with a kind of varnish; and by copying this work exactly on a large scale, Brunel was at length enabled to construct his " Shield " and accomplish his great engineering work.

It is the intelligent eye of the careful observer which gives these apparently trivial things their value. So trifling

a matter as the sight of seaweed floating past his ship, enabled Columbus to quell the mutiny which arose amongst his sailors at not discovering land, and to assure them that the eagerly sought New World was not far off. There is nothing so small that it should remain forgotten; and no fact, however trivial, but may prove useful in some way or other if carefully interpreted.

It is the close observation of little things which is the secret of success in business, in art, in science, and in every pursuit in life. Human knowledge is but an accumulation of small facts, made by successive generations of men, the little bits of knowledge and experience carefully treasured up by them growing at length into a mighty pyramid. Though many of these facts and observations seemed in the first instance to have but slight importance, they are all found to have their uses, and to fit into their proper places. Even many speculations seemingly remote, turn out to be the basis of results the most obviously practical.

When Franklin made his discovery of the identity of lightning and electricity, it was sneered at, and people asked, "Of what use is it?" To which his apt reply was, "What is the use of a child? It may become a man!" When Galvani discovered that a frog's leg twitched when placed in contact with different metals, it could scarcely have been imagined that so apparently insignificant a fact could have led to important results. Yet therein lay the germ of the Electric Telegraph, which binds the intelligence of continents together, and has "put a girdle round the globe." So too, little bits of stone and fossil, dug out of the earth, intelligently interpreted, have resulted in the science of geology and the practical operations of mining.

It is said that the Marquis of Worcester's attention was first accidentally directed to the subject of steam power, by the tight cover of a vessel containing hot water having been blown off before his eyes, when he was a prisoner in the Tower. He published the result of his observations in his Century of Inventions, which formed a sort of text-book for inquirers into the powers of steam for several generations, until Savary, Newcomen, and others, applying it to practical purposes, brought it to the state in which Watt found it when called upon to repair a model of Newcomen's engine, which belonged to the University of Glasgow. This accidental circumstance was an opportunity for Watt, which he was not slow to improve; and it was the labour of his life to bring the steam-engine to perfection.

This art of seizing opportunities and turning even accidents to account, is a great secret of success. Men who are resolved to find a way for themselves, will always find opportunities enough; and if they do not lie ready to their hand, they will make them. It is not those who have enjoyed the advantage of colleges, museums, and public galleries, that have accomplished the most for science and art; nor have the greatest mechanics and inventors been trained in mechanics' institutes. Necessity has been the mother of invention; and the best school of all has been the school of difficulty. Some of the very best workmen have had the poorest tools to work with. But it is not tools that make the workman, but the trained skill and perseverance of the man himself. Some one asked Opie, the painter, by what wonderful process he mixed his colours. "I mix them with my brains, sir," was his reply. It is the same with every workman who would excel. Ferguson made marvellous thingssuch as his wooden clock, that accurately measured the hours -by means of a common penknife, a tool in every-body's hand; but then everybody is not a Ferguson. A pan of water and two thermometers were the tools by which Dr. Black discovered latent heat; and a prism, a lens, and a sheet of pasteboard enabled Newton to unfold the composition of light and the origin of colours. An eminent foreign scientist once called upon Dr. Wollastton, and requested to be shown over

his laboratories in which science had been enriched by so many important discoveries. The doctor took him into a little study, and, pointing to an old tea-tray on the table, containing a few watch-glasses, test papers, a small balance, and a blow-pipe, said, "There is all the laboratory that I have!"

Stothard learnt the art of combining colours by closely studying butterflies' wings: he would often say that no one knew what he owed to these tiny insects. A burnt stick and a barn door served Wilkie in place of pencil and canvas. Bewick first practised drawing on the cottage walls of his native village, which he covered with his sketches in chalk; and Benjamin West made his first brushes out of the cat's Ferguson laid himself down in the fields at night in a blanket, and made a map of the stars by means of a thread with small beads on it stretched between his eye and the sky. Franklin first robbed the thunder cloud of its lightning by means of a kite made with two cross sticks and a silk handkerchief. Watt made his first model of the condensing steamengine out of an old anatomist's syringe, used to inject the arteries previous to dissection. Gifford worked his first problem in mathematics, when a cobbler's apprentice, upon small scraps of leather, which he beat smooth for the purpose; whilst Rittenhouse, the astronomer, first calculated eclipses on his plough handle.

Sir Humphry Davy, when an apothecary's apprentice, performed his first experiments with instruments of the rudest description—such as the pots and pans of the kitchen, and the bottles and vessels of his master's surgery. It happened that a French vessel was wrecked off the Land's End, and the surgeon escaped, bearing with him his case of instruments, amongst which was an old-fashioned glyster apparatus. This article he gave to Davy, with whom he had become acquainted. The apothecary's apprentice received it with great joy and forthwith employed it as part of a pneumatic apparatus which he contrived, afterwards using it as an air-pump

in one of his experiments on the nature and sources of heat. In like manner Professor Faraday, Sir Humphry Davy's scientific successor, made his first experiments in electricity by means of an old bottle, while he was still a working bookbinder.

The great Cuvier, when a youth, was one day strolling along the sands near Fiquainville, in Normandy, when he observed a cuttle fish lying stranded on the beach. He was attracted by the curious object, took it home to dissect, and began the study of the mollusca, which ended in his becoming one of the greatest among natural historians. In like manner, Hugh Miller's curiosity was excited by the remarkable traces of extinct sea-animals in the Old Red Sandstone, on which he worked as a quarryman. He inquired, observed, studied, and became a geologist. "It was the necessity," said he, "which made me a quarrier, that taught me to be a geologist."

It is not accident, then, that helps a man in the world, but purpose and persistent industry. These make a man sharp to discern opportunities, and turn them to account. To the feeble, the sluggish, and purposeless, the happiest opportunities avail nothing—they pass them by, seeing no meaning in them. But if we are prompt to seize and improve them, it is astonishing how much can be accomplished. Watt taught himself chemistry and mechanics while working at his trade of a mathematical instrument-maker; and he seized every opportunity to extend his knowledge of languages, literature, and the principles of science. Stephenson taught himself arithmetic and mensuration while working as an engineman during the night shifts, and he studied mechanics during his spare hours at home, thus preparing himself for his great work—the invention of the passenger locomotive.

With perseverance, the very odds and ends of time may be worked up into results of the greatest value. An

hour in every day withdrawn from frivolous pursuits, would, if profitably employed, enable a person of ordinary capacity to go far towards mastering a complete science. It would make an ignorant man a well-informed man in ten years. We must not allow the time to pass without yielding fruits, in the form of something learnt worthy of being known, some good principle cultivated, or some good habit strengthened.

What a solemn and striking warning to youth is that inscribed on the sun-dial at All Souls College Oxford—"Periunt et imputantur"—the hours perish, and are laid to our charge. For time, like life, can never be recalled. In "the dissipation of worldly treasure," says Jackson of Exeter, "the frugality of the future may balance the extravagance of the past; but who can say, 'I will take from minutes to-morrow to compensate for these I have lost to-day?"

Harrey.

Harvey, the discoverer of the circulation of the blood, was a worker of great perseverance. He spent not less than eight long years in research before he published his views on the circulation of the blood. He repeated and verified his experiments again and again. The tract in which he at length announced his views, was a most modest one-but simple, lucid, and conclusive. It was nevertheless received with ridicule by the medical profession, as the utterance of a crack-brained impostor. For some time, he did not make a single convert, and gained nothing but abuse. He had called in question the revered authority of the ancients; and it was even argued that his views were calculated to upset the authority of the Scriptures and undermine the very foundations of morality and religion. His little practice fell away, and he was left almost without a friend. This lasted for some years, until the great truth held fast by Harvey amidst all his adversity, gradually ripened by further observation, and after a period of about twenty-five years, it became generally recognized as an established scientific truth.

Jenner.

The difficulties encountered by Dr. Jenner in establishing his discovery of vaccination as a preventive of smallpox, were even greater than those of Harvey. Many, before him, had witnessed the cow-pox, and had heard of the report current among the milkmaids in Gloucestershire, that whoever had taken that disease was secure against small-pox. It was a trifling, vulgar rumour, supposed to have no significance whatever; and no one had thought it worthy of investigation, until it was accidentally brought under the notice of Jenner. He was a youth, pursuing his studies at Sodbury, when his attention was arrested by the casual remark made by a country girl who came to his master's shop for advice. The small-pox was mentioned, when the girl said, "I can't take' that disease, for I have had cow-pox." This remark attracted Jenner's attention, and he forthwith set about inquiring and making observations on the subject. His professional friends, to whom he mentioned his views, laughed at him, and even threatened to expel him from their society, if he persisted in worrying them with the subject. In London he was so fortunate as to study under Dr. John Hunter, and he told him about his views. The advice of the great anatomist was thoroughly characteristic: "Don't think, but try; be patient, be accurate." Jenner went back to the country to practise his profession, and carefully to make observations and experiments, which he continued for twenty years. His faith in his discovery was so great that he vaccinated his own son on three separate occasions. At length he published his views in a pamphlet of about seventy pages, in which he gave the details of twenty-three cases of successful vaccination of individuals, to whom it was found afterwards impossible to communicate the small-pox either by contagion

or inoculation. It was in 1798 that this treatise was published; though he had been working out his ideas as long before as 1775, when they began to assume a definite form.

How was the discovery received? First with indifference, then with active hostility. He went to London to exhibit to the medical profession the process of vaccination and . its successful results; but not a single doctor could be got to make a trial of it, and after fruitlessly waiting for nearly three months. Jenner returned to his native village. He was even caricatured and abused for his attempt to "bestialize" his species by the introduction into their systems of diseased matter from the cow's udder. Cobbett was one of his most furious assailants. Vaccination was denounced from the pulpit as "diabolical." It was stated that vaccinated children became "ox-faced." that abscesses broke out to "indicate sprouting horns," and that the countenance was gradually "changed into the visage of a cow, the voice into the bellowing of bulls." Vaccination, however, was a truth, and notwithstanding the violence of the opposition, belief in it spread slowly. In one village, where a gentleman tried to introduce the practice, the first persons who allowed themselves to be vaccinated were pelted with stones, and were driven into their houses if they appeared out of doors. Two ladies of title, Lady Ducie and the Countess of Berkeley, had the courage to vaccinate their own children; and the prejudices of the day were at once broken through. The medical profession gradually came round, and there were several who even sought to rob Dr. Jenner of the merit of the discovery, when its vast importance came to be recognized. Jenner's cause at last triumphed, and he was publicly honoured and rewarded. In his prosperity he was as modest as he had been in his obscurity. He was invited to settle in London, and told that he might command a practice of £ 10,000 a year. But his answer was, "No! In the morning of my days I have sought the lowly paths of life-the valley, and

not the mountain—and now, in the evening of my days, it is not meet for me to hold myself up as an object for fortune and for fame." In Jenner's own lifetime the practice of vaccination had been adopted all over the civilized world; and when he died, his title as a benefactor of his kind was recognized far and wide. Cuvier has said, "If vaccine were the only discovery of the epoch, it would serve to render it illustrious for ever."

Hugh Miller.

Hugh Miller was a man of equally simple tastes and observant faculties, who successfully devoted himself geological pursuits. The book in which he has himself told the story of his life, (My Schools and Schoolmasters), is extremely interesting. It is the history of the formation of a truly noble character in the humblest condition of life; and it teaches all, but especially poor men, what it is in the power of each to do for himself. The life of Hugh Miller is full of lessons of self-help and self-respect, and shows how these work out for a man an honourable living and a solid reputation. His father was drowned at sea when Hugh Miller was but a child, and he was left to be brought up by his widowed He had a school training after a sort, but his best teachers were the boys with whom he played, the men amongst whom he worked, and the friends and relatives with whom he lived. He read much, and gleaned pickings of odd knowledge from many odd quarters-from workmen, carpenters, fishermen and sailors, old women, and above all, from the old rocks strewed along the shores of the Cromarty Frith. With a big hammer, which had belonged to his great grandfather, the boy went about chipping the stones, and thus early collecting specimens of mica, porphyry, garnet and Sometimes he had a day in the woods, and there, too, the boy's attention was excited by the geological curiosities which lay in his way.

Hugh was apprenticed to the trade of working stone-mason; and he began his labouring career in a quarry looking out upon the Cromarty Frith. This quarry proved one of his best schools. Its remarkable geological formations awakened his curiosity. The bar of deep-red stone beneath, and the bar of pale-red clay above, were noted by the young quarryman, who even in such unpromising subjects found matter for observation and thought. Where other men saw nothing, he detected analogies, differences, and peculiarities, which set him a-thinking. He simply kept his eyes and his mind open; was sober, diligent, and persevering; and this was the secret of his intellectual growth.

His curiosity was excited, and kept alive by the curious organic remains, principally of old and extinct species of fishes, ferns, and ammonites, which lay revealed along the coasts by the washings of the waves, or were exposed by the stroke of his mason's hammer. He never lost sight of this subject; until at length, when no longer a working mason, many years afterwards, he gave to the world his highly interesting work on the Old Red Sandstone, which at once made his reputation as a scientific geologist. But this work was the fruit of long years of patient observation and research. As he modestly states in his autobiography, "the only merit to which I lay claim in the case is that of patient research—a merit in which whoever wills may rival or surpass me; and this humble faculty of patience, when rightly developed, may lead to more extraordinary developments of idea than even genius itself."

CHAPTER V

WORKERS IN ART

"If what shone afar so grand,
Turn to nothing in thy hand,
On again; the virtue lies
In the struggle, not the prize." - R. M. Milner.

Excellence in art, as in everything else, can be achieved only by painstaking labour. There is nothing less accidental than the painting of a fine picture or the chiselling of a noble statue. Every skilled touch of the artist's brush or chisel, though guided by genius, is the result of unremitting study.

Sir Joshua Reynolds was such a believer in industry, that he held that excellence in art, "however expressed by genius, taste, or the gift of heaven, may be acquired." Writing to a friend, he said, "Whoever is resolved to excel in painting, or indeed any other art, must bring all his mind to bear upon that one object from the moment that he rises till he goes to bed." And on another occasion he said, "Those who are resolved to excel must go to their work, willing or unwilling, morning, noon, and night: they will find it no play, but very hard labour." But although diligent application is no doubt absolutely necessary for the achievement of the highest distinction in art, it is equally true that without the inherent faculty, no mere amount of industry, however well applied, will make The gift comes by nature, but is perfected by an artist. self-culture.

Some of the greatest artists have had to force their way upward in the face of poverty and many difficulties. Claude Lorraine, the pastry-cook; Tintoretto, the dyer; Salvator Rosa, the associate of bandits; Giotto, the peasant boy; Canova,

the stone-cutter—these and many other well-known artists, became famous only by severe study and labour under the most adverse circumstances.

In the same way many well known British artists were born in positions of life most unfavourable to the culture of artistic genius. Thus Gainsborough and Bacon were the sons of cloth-workers; Barry was an Irish sailor boy, and Maclise a banker's apprentice at Cork; Opie and Romney, like Inigo Jones, were carpenters; West was the son of a small Quaker farmer in Pennsylvania; Northcote was a watchmaker, and Etty a printer.

Like Sir Joshua Revnolds, Michael Angelo was a great believer in the force of labour; and he held that there was nothing which the imagination conceived, that could not be embodied in marble, if the hand were made vigorously to obey the mind. He was himself one of the most tireless of workers: and he attributed his power of studying for a greater number of hours than most of his contemporaries, to his spare habits of living. A little bread and wine was all he required for the chief part of the day when employed at his work; and very frequently he rose in the middle of the night to resume his labours. On these occasions, it was his practice to fix the candle, by the light of which he worked, on the top of a paste-board cap which he wore. Sometimes he was too wearied to undress, and he slept in his clothes, ready to spring to his work so soon as refreshed by sleep. He had a favourite device of an old man in a go-cart, with an hour-glass upon it bearing the inscription, Ancora imparo! "still I am learning."

Titian, also, was an indefatigable worker. His celebrated picture, "Pietro Martire," was eight years in hand, and his Last Supper," seven. In his letter to Charles V he said, "I send your Majesty the 'Last Supper' after working at it almost daily for seven years." Few think of the patient labour and long training required by the greatest works of the artist.

They seem easy and quickly accomplished, yet with how great difficulty has this ease been acquired. "You charge me fifty sequins," said the Venetian nobleman to the sculptor, "for a bust that cost you only ten days' labour." "You forget," said the artist, "that I have been thirty years learning to make that bust in ten days."

Art is indeed a long labour, no matter how richly nature has bestowed the gift of the artistic faculty. In most cases this has shown itself early. The anecdote related of West is well-known. When only seven years old, struck with the beauty of the sleeping baby of his eldest sister whilst watching by its cradle, he ran to seek some paper and forthwith drew its portrait in red and black ink. The little incident revealed the artist in him, and it was found impossible to draw him from his bent. West might have been a greater painter, had he not been injured by too early success: his fame, though great, was not purchased by study, trials, and difficulties and it has not been enduring.

Hogarth.

Hogarth, though a very dull boy at his lessons, took pleasure in making drawings of the letters of the alphabet, and his school exercises were more remarkable for the ornaments with which he adorned them, than for the matter of the exercises themselves. In the latter respect he was beaten by all the blockheads of the school, but in his adornments he stood alone. His father put him as apprentice to a silversmith, where he learnt to draw, and also to engrave spoons and forks with crests and ciphers: from silverchasing, he went on to teach himself to engrave on copper, principally griffins and monsters of heraldry; in the course of which practice he became ambitious to draw the varieties of human character. The remarkable excellence which he reached in this art, was mainly the result of careful observation and study. He had the gift, which he carefully cultivated, of committing to memory the precise features of any remarkable face, and

afterwards reproducing it on paper; but if any specially fantastic form or face came in his way, he would make a sketch of it on the spot upon his thumb-nail, and carry it home to expand at his leisure. Everything fantastical and original had a powerful attraction for him, and he wandered into many out-of-the-way places for the purpose of meeting with character. By this careful storing of his mind, he was afterwards enabled to crowd an immense amount of thought and treasured observation into his works. Hence it is that Hogarth's pictures are so truthful a memorial of the characters, the manners, and even the very thoughts of the times in which he lived. True painting, he himself observed, can only be learnt in one school, and that is kept by Nature. But he was not a highly cultivated man, except in his own walk. His school education had been of the smallest kind, scarcely even perfecting him in the art of spelling; his self-culture did the rest. For a long time he was very poor but he worked on with a cheerful heart. Poor though he was, he managed to live within his small means, and he boasted, with becoming pride, that he was "a punctual paymaster." When he had conquered all his difficulties and become a famous and thriving man, he loved to dwell upon his early labours and privations, and to fight over again the battle which ended so honourably to him as a man and so gloriously as an artist. "I remember the time," said he on one occasion, "when I have gone moping into the city with scarce a shilling, but as soon as I have received ten guineas there for a plate, I have returned home, put on my sword, and sallied out with all the confidence of a man who had thousands in his pockets."

Claude Lorraine.

The fame of Claude Lorraine, the great French landscape painter, is partly explained by his untiring industry. He was born at Champagne, in Lorraine, of poor parents, who find apprenticed him to a pastry-cook. His brother, who was a

wood-carver, afterwards took him into his shop to learn his trade. As he showed he had artistic skill, a travelling dealer persuaded the brother to allow Claude to go with him to Italy. He agreed, and the young man reached Rome, where he was engaged by Agostino Tassi, the landscape painter, as his houseservant. There Claude first learnt landscape painting, and in course of time began to produce pictures. We next find him making the tour of Italy, France and Germany, occasionally resting by the way to paint landscape so as to pay his expenses. When he returned to Rome he found his pictures in great demand, and his reputation at length became European. He was unwearied in the study of nature. was his practice to spend a great part of his time in closely copying buildings, bits of ground, trees, leaves and such like, which he finished in detail, keeping the drawings by him for the purpose of introducing them into his studied landscapes. He also watched the sky for whole days and nights, noting the various changes caused by the passing clouds and the increasing and waning light. But by this constant practice he slowly obtained such a mastery of hand and eye that he at last attained the first rank among landscape painters.

Turner.

Turner, who has been called "the English Claude," was also noted for his laborious industry. His father intended to put him into his own trade, that of a barber, until one day a customer, whom his father was shaving, noticed a sketch which young Turner had made of a coat-of-arms on a silver dish. The customer saw the boy had talent, and persuaded the father to let him follow art as his profession. Like all young artists, Turner had many difficulties to put up with; but he was always willing to work and to take pains with his work, no matter how humble it might be. He was glad to hire himself out at half-a-crown a night to wash in skies in Indian ink upon other people's drawings, getting his supper into the bargain. In this way he earned money and gained skill. Then he took

to illustrating guide-books, almanaes, and any sort of books that wanted cheap frontispieces. "What could I have done better?" he said afterwards; "it was first rate practice." He did everything carefully and conscientiously, never slurring over his work because he was ill-paid for it. He aimed at learning as well as living; always doing his best, and never leaving a drawing without having made a step in advance upon his previous work. A man who thus laboured was sure to do much; and his growth in power and grasp of thought was, to use Ruskin's words, "as steady as the increasing light of sunrise." But Turner's genius does not need any words of praise; his best monument is the noble gallery of pictures left by him to the nation, which will ever be the lasting memorial of his fame.

Flasman.

John Flaxman was a true genius. He was besides a person of beautiful character, his life furnishing many sound lessons for men of all ranks. Flaxman was the son of a humble seller of plaster casts in New Street, Covent Garden, in London; and when a child, he was so constant an invalid that it was his custom to sit behind the shop counter propped by pillows, amusing himself with drawing and reading. A kind clergyman, named Matthews, one day calling at the shop, found the boy trying to read a book, a copy of Cornelius Nepos, which his father had picked up for a few pence at a bookstall. The gentleman, after some conversation with the boy, said that was not the proper book for him to read, but that he would bring him a right one on the morrow; and the kind man was as good as The Rev. Mr. Matthews used afterwards to say, that from that casual interview with the cripple little invalid behind the plaster-cast seller's shop counter, began an acquaintance which ripened into one of the best friendships of his life. He brought several books to the boy, amongst which were Homer and Don Quixote, in both of which Flaxman then and ever after took immense delight. His mind was soon full of the heroism which breathed through the pages of Homer, and, with the stucco Ajaxes and Achilleses about him, looming along the shop shelves, the ambition thus early took possession of him, that he too would design and embody in poetic forms those majestic heroes. His black chalk was at once in his hand, and the enthusiastic boy laboured to body forth in visible shapes the actions of the Greeks and Trojans.

Like all youthful efforts, his first designs were crude. The proud father one day showed them to Roubilliac, the sculptor, who turned from them with a contemptuous "pshaw!" But the boy had the right stuff in him; he had industry and patience; and he continued to labour incessantly at his books and drawings. He then tried his young powers in modelling figures in plaster of Paris, wax, and clay; some of these early works are still preserved, not because of their merit, but because they are curious as the first efforts of patient genius.

The boy was long before he could walk, and he only learned to do so by hobbling along upon crutches. As his physical health improved, the little Flaxman was able to throw away his crutches. The kind Mr. Matthews invited him to his house, where his wife explained Homer and Milton They helped him also in his self-culture—giving him lessons in Greek and Latin. When under Mrs. Matthews. he also tried with his bit of charcoal to illustrate on paper such passages as struck his fancy. His drawings could not, however, have been very extraordinary, for when he showed a drawing of an eye which he had made, to an artist, that gentleman with affected surprise exclaimed, "Is it an oyster?" The sensitive boy was much hurt, and for a time took care to avoid showing his drawings to artists, who, though a thinskinned race, are sometimes disposed to be very savage in their criticisms on others. At length, by perseverance and study his drawing improved so much that Mrs. Matthews obtained a commission for him from a lady, to draw six original drawings in black chalk of subjects in Homer. His first commission! A great event that in the boy's life. A surgeon's first fee, a lawyer's first retainer, a legislator's first speech, a singer's first appearance behind the footlights, an author's first book, are not any of them more full of interest to the individual than the artist's first commission. The boy duly carried out the order, and was both well praised and well paid for his work.

At fifteen Flaxman entered as a student at the Royal Academy. Notwithstanding his retiring disposition, Flaxman soon became known among the students, and great things were expected of him. Nor were their expectations disappointed: in his fifteenth year he gained the silver prize, and next year he became a candidate for the gold one. Everybody prophesied that he would carry off the medal, for there was none who surpassed him in ability and industry. The youth did his best, but he lost it, and the gold medal was adjudged to Engleheart. who was not afterwards heard of. This failure on the part of the youth was really of service to him; for defeats do not long cast down the resolute-hearted, but only serve to call forth their real powers. "Give me time," said he to his father, "and I will yet produce works that the Academy will be proud to recognize." He redoubled his efforts, spared no pains, designed and modelled incessantly, and consequently made steady if not rapid progress. But meanwhile poverty threatened his father's household; the plaster-cast trade yielded a very bare living; and young Flaxman, with resolute self-denial, cut short his hours of study, and devoted himself to helping his father in the humble details of his business. He laid aside his Homer to take up the plaster-trowel. He was willing to work in the humblest department of the trade so that his father's family might be supported, and the wolf kept from the door. To this drudgery of his art he served a long apprenticeship; but it did him good. It familiarized him with steady work, and cultivated in him the spirit of patience. The discipline may have been rough, but it was wholesome.

Happily, young Flaxman's skill in design had reached the. knowledge of Mr. Wedgewood, who sought him out for the purpose of employing him in designing improved patterns of china and earthenware to be produced at his manufactory. may seem a humble department of art for Flaxman to have laboured in; but it really was not so. An artist may be labouring truly in his vocation while designing even so common an article as a tea-pot or a water-jug. Articles which are in daily use amongst the people, and are before their eyes at every meal, may be made the means of art-education to all. The most ambitious artist may thus confer a greater practical benefit on his countrymen than by executing an elaborate work which he may sell for thousands of pounds, to be placed in some wealthy man's gallery, where it is hidden away from public sight. Before Wedgewood's time the designs upon our china and stoneware were hideous both in drawing and execution, and he determined to improve both. Finding out Flaxman, he said to him: "Well, my lad, I have heard that you are a good draughtsman and clever designer. I'm a manufacturer of pots-name Wedgewood. Now, I want you to design some models for me-nothing fantastic, but simple, tasteful, and correct in drawing. I'll pay you well. You don't think the work beneath you?" "By no means, sir," replied Flaxman, "indeed the work is quite to my taste. Give me a few days-call again, and you will see what I can do." "That's right-work away. Mind, I am in want of them now. They are for pots of all kinds-tea-pots, jugs, tea-cups and saucers. But especially I want designs for a table-service. Begin with that. I mean to supply one for the royal table. Now, think of that, young man. What you design is meant for the eyes of royalty!" "I will do my best, sir, I assure you." And the kind gentleman bustled out of the shop as he had come in.

Flaxman did his best. By the time that Mr. Wedgewood next called upon him, he had a series of models prepared for various pieces of earthenware. They consisted chiefly of small groups in very low relief—the subjects taken from ancient verse and history. Many of them are still in existence, and some are equal in beauty and simplicity to his after designs for marble. Flaxman saw that he was labouring in a great work—no less than the promotion of popular education; and he was proud, in after life, to allude to these his early labours, by which he was enabled at the same time to cultivate his love of the beautiful, to diffuse a taste for art among the people, and to earn money, while he promoted the prosperity of his friend and benefactor.

Engaged in such labours as these, for several years Flaxman executed but few works of art, and then at rare intervals. He lived a quiet, secluded, and simple life, working during the day, and sketching and reading in the evenings. He was so poor that he had as yet been only able to find plaster of Paris for his works—marble was too dear a material for him. He had hitherto made only one statue in the marble, and that was a commission.

At length, in the year 1782, when twenty-seven years of age, he left his father's roof and rented a small house and studio in Wardour Street, Soho; and what was more, he married—Ann Denman was the name of his wife—and a cheery, bright-souled, noble woman she was. He believed that in marrying her he should be able to work with an intenser spirit; for, like him, she had a taste for poetry and art; and besides was an enthusiastic admirer of her husband's genius. Yet when Sir Joshua Reynolds—himself a bachelor—met Flaxman shortly after his marriage, he said to him, "So, Flaxman, I am told you are married; if so, sir, I tell you you are ruined as an artist." Flaxman went straight home, sat down beside his wife, took her hand in his, and said, "Ann, I am ruined for an artist." "How

so, John? How has it happened? and who has done it?" "It happened," he replied, "in the church, and Ann Denman has done it." He then told her of Sir Joshua's remark -whose opinion was well known, that if students would excel they must bring the whole powers of their mind to bear upon their art, from the moment they rise until they go to bed; and also, that no man could be a great artist unless he studied the grand works of Raffaelle, Michael Angelo, and others, at Rome and Florence. "And I," said Flaxman, drawing up . his little figure to its full height, "I would be a great artist." "And a great artist you shall be," said his wife, "and visit Rome too, if that be really necessary to make you great." "But how?" asked Flaxman. "Work and economize," rejoined the brave wife: "I will never have it said that Ann Denman ruined John Flaxman for an artist." And so it was determined by the pair that the journey to Rome was to be made when their means would admit. "I will go to Rome." said Flaxman, "and show the President that marriage is for a man's good rather than his harm; and you, Ann, shall go with me."

Patiently and happily this affectionate couple plodded on during five years in that humble little home in Wardour Street; and at length Flaxman and his wife, having thriftily accumulated a sufficient store of savings, set out for Rome. Arrived there, he applied himself diligently to study, maintaining himself, like other poor artists, by making copies from the antique. English visitors sought his studio, and gave him commissions; and it was then that he composed his beautiful designs illustrative of Homer, Æschylus, and Dante. The price paid for them was moderate—only fifteen shillings a-piece; but Flaxman worked for art as well as money; and the beauty of the designs brought him new friends and patrons. He executed Cupid and Aurora for the munificent Thomas Hope, and the Fury of Athamas for the Earl of Bristol. He then prepared to turn to England, his taste improved and

cultivated by careful study; but before he left Italy, the Academies of Florence and Carrara recognized his merit by electing him a member.

His fame had gone before him to England, and he soon found abundant employment. While at Rome, he had been commissioned to execute his famous monument in memory of Lord Mansfield, and it was erected in the north transept of Westminster Abbey shortly after his return. It stands there in majestic grandeur, a monument to the genius of Flaxman himself—calm, simple, and severe. No wonder that Banks, the sculptor, then in the heyday of his fame, exclaimed when he saw it, "This little man cuts us all out!" Soon after he was elected a member of the Royal Academy.

His progress was now rapid, and he was constantly employed. Perseverance and study, which had matured his genius, had made him great, and he went on from triumph to triumph. But he appeared in yet a new character. The little boy who had begun his studies behind the poor plaster-east-seller's shop-counter in New Street, Covent Garden, was now a man of high intellect and recognized supremacy in art, to instruct aspiring students, in the character of Professor of Sculpture to the Royal Academy! And no man better deserved to fill that distinguished office; for none is so able to instruct others as he who, for himself and by his own almost unaided efforts, has learnt to grapple with and overcome difficulties.

Flaxman's monuments are known nearly all over England. Their mute poetry beautifies most of our cathedrals, and many of our rural churches. Whatever work of this kind he executed, he threw a soul and meaning into it, embodying some high Christian idea of charity, of love, of resignation, of affection, or of kindness. In monuments such as these his peculiar genius pre-eminently shone. There is a tenderness and grace

about them which no other artist has been able to surpass, or even to equal.

Wilkie.

The same honest and persistent industry marked the career The son of a poor Scotch minister, he gave of David Wilkie. early signs of an artistic turn; and though he was negligent scholar, he was a sedulous drawer of faces and figures. silent boy, he already displayed that quiet concentrated energy of character which distinguished him through life. He was always on the look-out for an opportunity to draw-and the walls of the manse, or the smooth sand by the riverside, came alike convenient for his purpose. Any sort of tool would serve him; like Giotto, he found a pencil in a burnt stick. a prepared canvas in any smooth stone, and the subject for a picture in every ragged beggar met. When he visited a house, he generally left his mark on the walls, sometimes to the disgust of cleanly housewives. In short notwithstanding the dislike of the father, the minister, to the profession of painting, Wilkie's strong propensity was not to be thwarted, and he became an artist; working his way manfully up the steep of difficulty. Though rejected on his first application as a candidate for admission to the Scottish Academy, at Edinburgh, on account of the rudeness and inaccuracy of his early drawings, he persevered in producing better, until he was admitted. But his progress was slow. He applied himself diligently to the drawing of the human figure. displayed none of the excentric humour and fitful application of many youths who think themselves geniuses, but kept up the routine of steady application to such an extent that he himself attributed his success to his dogged perseverance rather than to any higher innate power. "The single element," he said "in all the progressive movements of my pencil was persevering industry." At Edinburgh he sold a few pictures, and thought of turning his attention to portrait painting, because it paid better, but at last went boldly into

the line in which he earned his fame—and painted his Pitlessie Fair. What was bolder still, he determined to proceed to London, as it presented so much wider a field for study and work; and the poor Scotch lad arrived in town, and painted his Village Politicians while living in a humble lodging on eighteen shillings a week.

Notwithstanding the success of this picture, and commissions which followed it, Wilkie long continued poor. The prices which his works realized were not great, for he bestowed upon them so much time and labour, that his earnings continued comparatively small for many years. Every picture was carefully studied and elaborated beforehand; nothing was struck off at a heat; many occupied him for years—touching, retouching, and improving them until they finally passed out of his hands. As with Reynolds, his motto was "Work! work! work!" and, like him, he expressed great dislike for talking artists. Talkers may sow, but the silent reap. "Let us be doing something," was his indirect way of rebuking the talkative and admonishing the idle. He once related to his friend Constable that, when he studied at the Scottish Academy, Graham, the master of it, was accustomed to say to the students, in the words of Reynolds, "If you have genius, industry will improve it; if you have none, industry will supply its place." "So," said Wilkie, "I was determined to be very industrious, for I knew I had no genius." He also told Constable that when his fellow-students in London. were talking about art, he always contrived to get as close to them as he could to hear all they said, "for," said he, "they know a great deal, and I know very little." This was said with perfect sincerity, for Wilkie was habitually modest. One of the first things that he did with the small sum of thirty pounds which he obtained from Lord Mansfield for his Village Politicians, was to buy a present—of bonnets, shawls, and dresses-for his mother and sister at home; though but little able to afford it at the time. Wilkie's early poverty

had trained him in habits of strict economy, which were, however, consistent with a noble liberality.

George Kemp.

A similar illustration of plodding industry is the career of George Kemp, the architect of the beautiful Scott Monument of Edinburgh. He was the son of a poor shepherd, who kept sheep on the southern slope of the Pentland Hills. Amidst that pastoral solitude the boy had no opportunity of seeing beautiful works of art. It happened, however, that in his tenth year he was sent on a message to Roslin, by the farmer for whom his father herded sheep, and the sight of the beautiful castle and chapel there seems to have made a vivid and enduring impression on his mind. Probably to enable him to indulge his love of architectural construction, the boy besought his father to let him be a joiner; and he was accordingly made model apprentice to a neighbouring village carpenter. Having served his time, he went to Galashiels to seek work, doing the journey on foot. Whilst working at his trade at Galashiels, Kemp had frequent opportunities of visiting Melrose, Dryburgh, and Jedburgh Abbeys, and studying them earefully. Inspired by his love of architecture, he next worked his way, as a carpenter, over the greater part of the north of England taking every opportunity of inspecting and making sketches of any fine Gothic building. On one occasion. when working at his trade in Lancashire, he walked fifty miles to York, spent a week in carefully examining the Minster, and returned in like manner on foot. We next find him in Glasgow, where he remained four years, studying the fine cathedral there during his spare time. He returned to England again, this time working his way further south; studying Canterbury, Winchester, Tintern and other well-known structures. In 1824 he formed the design of travelling over Europe with the same object, supporting himself by his trade. He commenced at Boulogne, and from thence proceeded by Abbeville

and Beauvais to Paris, spending a few weeks, making drawings and studies, in each place. His skill as a mechanic, and especially his knowledge of mill-work, readily secured him employment wherever he went. After a year's working, travel, and study abroad, he was abruptly summoned home by family affairs, and returned to Scotland.

He continued his studies, and became a proficient in drawing and perspective. Few knew of the genius of this man—for he was exceedingly taciturn and habitually modest—when the Committee of the Scott Monument offered a prize for the best design. The competitors were numerous—including some of the greater names in classical architecture; but the design unanimously selected was that of George Kemp, then working at Kilwining Abbey in Ayrshire, many miles off, when the letter reached him intimating the decision of the Committee. Poor Kemp! Shortly after this event he met an untimely death, and did not live to see the first result of his indefatigable industry and self-culture embodied in stone—one of the most beautiful and appropriate memorials ever erected to literary genius.

CHAPTER VI

ENERGY AND COURAGE

"In every work that he began.....he did it with all his heart, and prospered."—Bible: 2 Chron. 31. 21.

THERE is a famous speech recorded of a Norseman—"I believe neither in idols nor demons," said he, "I put my sole trust in my own strength of body and soul." The ancient crest of a pickaxe with the motto "Either I will find a way or make one," was an expression of the same sturdy independence, which to this day distinguishes the descendants of the Northmen.

The cultivation of this quality is of the greatest importance: resolute determination in the pursuit of worthy objects being the foundation of all true greatness of character. Energy enables a man to force his way through irksome drudgery and dry details, and carries him onward and upward in every station in life. Hence energy of will may be defined to be the very central power of character in a manin a word, it is the Man himself. It gives impulse to his every action, and soul to every effort. True hope is based on it,—and it is hope that gives the real perfume to life. is a fine heraldic motto on a broken helmet in Battle Abbey, "L'espoir est ma force" (" Hope is my power"), which might be the motto of every man's life. "Woe unto him that is faint-hearted," says the son of Sirach. There is, indeed, no blessing equal to the possession of a stout heart. man fail in his efforts, it will be a great satisfaction to him to know he has done his best. In humble life nothing can be more cheering and beautiful than to see a man combating suffering by patience, triumphing in his integrity, and when his feet are bleeding and his limbs failing him, still walking with courage.

Mere wishes and desires simply cause a sort of green sickness in young minds, unless they are promptly embodied in deeds. It will not avail merely to wait, as so many do, "until Blucher comes up," but they must struggle on and persevere in the meantime, as Wellington did. The good purpose once formed must be carried out with alacrity, and without swerving. In many walks of life, drudgery and toil must be cheerfully endured as the necessary discipline of life. Hugh Miller says the only school in which he was properly taught was "that world-wide school in which toil and hardship are the severe but noble teachers." He'who allows his application to falter, or shirks his work on frivolous pretexts, is on the sure road to ultimate failure. Let any task be undertaken as a thing not possible to be evaded, and it will soon come to be performed with alacrity and cheerfulness.

It is will—force of purpose—that enables a man to do or be whatever he sets his mind on being or doing. A holy man was accustomed to say, "Whatever you wish, that you are: for such is the force of our will, joined to the Divine, that whatever we wish to be, seriously, and with a true intention, that we become. No one ardently wishes to be submissive, patient, modest, or liberal, who does not become what he wishes."

"You are now at the age," said Lamennais once to a gay youth, "at which a decision must be formed by you; a little later, and you may have to groan within the tomb which yourself have dug, without the power of rolling away the stone. That which most easily becomes a habit in us is the will. Learn then to will strongly and decisively; thus fix your floating life, and leave it no longer to be carried hither and thither, like a withered leaf, by every wind that blows."

Buxton believed that a young man might be very much what he pleased, provided he formed a strong resolution and held to it. Writing to one of his own sons, he once said,

"You are now at that period of life, in which you must make a turn to the right or the left. You must now give proofs of principle, determination, and strength of mind; or you must sink into idleness, and acquire the habits and character of a desultory, ineffective young man; and if once you fall to that point, you will find it no easy matter to rise again. am sure that a young man may be very much what he pleases. In my own case it was so. . . Much of my happiness, and all my prosperity in life, have resulted from the change I made at your age. If you seriously resolve to be energetic and industrious, depend upon it that you will for your whole life have reason to rejoice that you were wise enough to form and to act upon that determination." As will, considered without regard to direction, is simply constancy, firmness, perseverance, it will be obvious that everything depends upon right direction and motives. Directed towards the enjoyment of the senses, the strong will may be a demon, and the intellect merely its debased slave; but directed towards good, the strong will is a king, and the intellect is then the minister of man's highest well-being.

"Where there is a will there is a way," is an old and true He who resolves upon doing a thing, by that very resolution often clears away the difficulties. To think we are able, is almost to be so—to determine upon attainment is often attainment itself. The strength of Suwarrow's character lay in his power of willing, and, like most resolute persons, he preached it up as a system. "You can only half will," he would say to people who failed. Like Richelieu and Napoleon. he would have the word "impossible" banished from the dictionary. "I don't know," "I can't," and "impossible," were words which he detested above all others. "Learn! Do! Try!" he would exclaim. His biographer has said of him, that he furnished a remarkable illustration of what may be accomplished by the energetic development and exercise of faculties, the germs of which at least are in every human heart.

One of Napoleon's favourite maxims was, "The truest wisdom is a resolute determination." His life, beyond most others, vividly showed what a powerful and unscrupulous will could accomplish. He threw his whole force of body and mind direct upon his work. Weak rulers and the nations they governed went down before him in succession. He was told that the Alps stood in the way of his armies-"There . shall be no Alps," he said, and the road across the Simplon pass was constructed, through a district formerly almost inaccessible. "Impossible," said he, "is a word only to be found in the dictionary of fools." He was a man who toiled terribly; sometimes employing and exhausting four secretaries at a time. He spared no one, not even himself. His influence inspired other men, and put a new life into them. made my generals out of mud," he said. But all was of no avail: for Napoleon's intense selfishness was his ruin, and the ruin of France. His life taught the lesson that power, however energetically wielded, without beneficence, is fatal to its possessor and its subjects; and that knowledge, or knowingness, without goodness, is but the incarnate principle of evil.

Our own Wellington was a far greater man. Not less resolute, firm, and persistent, but much more self-denying, conscientious, and truly patriotic. Napoleon's aim was "Glory"; Wellington's watchword, like Nelson's, was "Duty." The former word, it is said, does not once occur in his despatches; the latter often. The greatest difficulties could neither embarrass nor intimidate Wellington; his energy always rising in proportion to the obstacles to be surmounted. The patience, the firmness, the resolution, with which he bore through the maddening vexations and gigantic difficulties of the Peninsular campaigns, is, perhaps, one of the sublimest things to be found in history. In Spain, Wellington not only showed the genius of the general, but the wisdom of the statesman. Though his natural temper was irritable in the

extreme, his high sense of duty enabled him to restrain it, and to those about him his patience seemed inexhaustible. His great character stands untarnished by ambition, by avarice, or any low passion. The equal of Napoleon in general-ship, he was as prompt, vigorous, and daring as Clive; as wise a statesman as Cromwell; and as pure and high-minded as Washington. The great Wellington left behind him an enduring reputation, founded on toilsome campaigns won by skilful combination, by fortitude which nothing could exhaust, by sublime daring, and perhaps still sublimer patience.

Sir Charles Napier was another military leader of remarkable courage and determination. As he once said when surrounded with difficulties in one of his campaigns, "They only make my feet go deeper into the ground." His battle of Meeanee was one of the most extraordinary feats in history. With 2,000 men, of whom only 400 were Europeans, he encountered an army of 35,000 hardy and well-armed Beloochees. It was an act, apparently, of the most daring temerity, but the general had faith in himself and in his men. He charged the Belooch centre up a high bank which formed their rampart in front, and for three mortal hours the battle raged. Each man of that small force, inspired by the chief, became for the time a hero. The Beloochees, though twenty to one, were driven back, but with their faces to the foe. It is this sort of pluck, tenacity, and determined perseverance which wins soldiers' battles, and, indeed, every battle. It is this one neck nearer that wins the race and shows the blood; it is the one march more that wins the campaign; the five minutes' more persistent courage that wins the fight. Though your force be less than another's, you equal and outmaster your opponent if you continue it longer and concentrate it more. The reply of the Spartau father, who said to his son, when he complained that his sword was too short, "Add a step to it," can be applied to everything in life.

Napier took the right method of inspiring his men with his own heroic spirit. He worked as hard as any private in the ranks. "The great art of commanding," he said, "is to take a fair share of the work. The man who leads an army cannot succeed unless his whole mind is thrown into his work. The more trouble, the more labour must be given; the more danger, the more pluck must be shown, till all is overpowered." A young officer, who accompanied him in his campaign in the Cutchee Hills, once said, "When I see that old man incessantly on his horse, how can I be idle who am young and strong? I would go into a loaded cannon's mouth if he ordered me." When this remark was repeated to Napier, he said it was ample reward for his toils.

Energy usually displays itself in promptitude and decision. Blucher's promptitude obtained for him the nickname of "Marshal Forwards" throughout the Prussian army. When John Jervis, afterwards Earl St. Vincent, was asked when he would be ready to join his ship, he replied, "Directly." And when Sir Colin Campbell, appointed to the command of the Indian army, was asked when he could set out, his answer was, "To-morrow." For it is rapid decision, and promptitude in action, such as taking instant advantage of an enemy's mistakes, that so often wins battles. "Every moment lost," said Napoleon, "gives an opportunity for misfortune;" and he used to say that he beat the Austrians because they never knew the value of time; while they dawdled, he overthrew them.

But not less energy and courage have been displayed by Englishmen in various other lines of action of a more peaceful and beneficent character than that of war. Henry Martyn, William Carey, John Williams, David Livingstone, and many others equally distinguished missionaries, have quite as nobly illustrated the power of energetic action in their lonely labours in India, Africa, and the islands of the Pacific.

Livingstone.

The career of Dr. Livingstone is the most interesting of He has told the story of his own life in that modest manner which is so characteristic of the man himself. His ancestors were poor, honest Highlanders, and it is related of one of them, renowned in his district for wisdom and prudence, that when on his deathbed he called his children round him and said, - "In my life-time," said he, "I have searched most carefully through all the traditions I could find of our family, and I never could discover that there was a dishonest man among our forefathers: if, therefore, any of you or any of your children should take to dishonest ways, it will not be because it runs in our blood; it does not belong to you. I leave this precept with you-"Be honest." At the age of ten Livingstone was sent to work in a cotton factory near Glasgow as "piecer." With part of his first week's wages he bought a Latin grammar, and began to learn that language, pursuing the study for years at a night school. He would sit up learning his lessons till twelve or later, when not sent to bed by his mother, for he had to be up and at work in the factory every morning by six. In this wav he plodded through Virgil and Horace, also reading all books, excepting novels, that came in his way, but more especially scientific works and books of travels. In his pursuit of botany he occupied his spare hours, which were but few, in scouring the neighbourhood collecting plants. He even carried on his reading amidst the roar of the machinery in the mill, so placing the book upon the spinning jenny which he worked that he could catch sentence after sentence as he passed. In this way the persevering factory boy acquired much useful knowledge; and as he grew older, the desire possessed him of becoming a missionary to the heathen. With this object he set himself to obtain a medical education. He saved enough money to support himself

while attending the Medical and Greek classes as well as the Divinity Lectures, at Glasgow, for several winters, working as a cotton spinner during the remainder of each year. He thus supported himself, during his college career, entirely by his own earnings as a factory workman, never having received a farthing of help from any other source. "Looking back now," he honestly says, "at that life of toil, I cannot but feel thankful that it formed such a material part of my early education; and, were it possible, I should like to begin life over again in the same lowly style, and to pass through the same hardy training." At length he finished his medical course, wrote his Latin thesis, passed his examinations, and was admitted a licentiate of the Faculty of Physicians and Surgeons. At first he thought of going to China, but the war then raging with that country prevented his following out that idea; and having offered his services to the London Missionary Society, he was by them sent out to Africa, which he reached in 1840. Arrived in Africa, he set to work with great vigour. He did not like the idea of merely entering upon the labours of others, but cut out a large sphere of independent work, preparing himself for it by undertaking manual labour in building and other handicraft employment, in addition to teaching, which, he says, " made me generally as much exhausted and unfit for study in the evenings as ever I had been when a cotton-spinner." Whilst labouring amongst the Bechuanas, he dug canals, built houses, cultivated fields, reared cattle, and taught the natives while he worked with them.

John Howard.

The life of John Howard was throughout a striking illustration of the power of patient purpose and action. His sublime life proved that even physical weakness could remove mountains in the pursuit of an end recommended by duty. The idea of bettering the condition of prisoners engrossed his whole thoughts and possessed him like a passion; and no

toil, nor danger, nor bedily suffering could turn him from that great purpose of his life. Though a man of no genins and but moderate talent, his heart was pure and his will was strong. Even in this own time he achieved a remarkable degree of success; but his influence did not die with him, for it has continued powerfully to influence not only the legislation of England, but of all civilized nations, even to the present hour.

Granville Sharp.

The life of Granville Sharp is another striking example of the same power of individual energy—a power which afterwards inspired the noble band of workers in the cause of Slavery Abolition, prominent among whom were Clarkson, Wilberforce, Buxton, and Brougham. But, giants though these men were in this cause, Granville Sharp was the first, and perhaps the greatest of them all in perseverance, energy, and courage. He began life as apprentice to a linendraper on Tower Hill, London; but, leaving that business after his apprenticeship was out, he next entered as a clerk in the Ordnance Office; and it was while engaged in that humble position that he carried on in his spare hours the work of Negro emancipation. He was always, even when an apprentice, ready to undertake any amount of volunteer labour where any useful purpose was to be served. . But the circumstance which gave the bias and direction to the main labours of his life, originated in his generosity and benevolence. It was in this wise. His brother William. a surgeon in Mincing Lane, gave free advice to the poor, and amongst the numerous applicants for relief at his surgery was a poor African named Jonathan Strong. The negro had been so brutally treated by his master, a Barbadoes lawyer then in London, that he had been rendered lame and almost blind, and was altogether unable to work; and his owner, regarding him as no longer of the slightest value as a chattel, cruelly turned him adrift into the streets of London.

poor man, a mass of disease. supported himself by begging for a time, until he found his way to William Sharp, who gave him some medicine, and shortly after got him admitted to St. Bartholomew's hospital, where he was cured. coming out of the hospital, the two brothers supported the negro in order to keep him off the streets, but they had not the least suspicion at the time that any one had a claim upon his person. They even succeeded in obtaining situation for Strong with a chemist, in whose service he remained for two years; and it was while he was attending his mistress behind a hackney coach, that his former owner, the Barbadoes lawyer, recognized him, and determined to recover possession of the slave. The lawver employed two of the Lord Mayor's officers to arrest Strong, and he was lodged in prison, until he could be shipped off to the West Indies. The negro, remembering in his captivity the kind services which Granville Sharp had rendered him in his great distress some years before, despatched a letter to him requesting his help. Sharp had forgotten the name of Strong, but he sent a messenger to make inquiries, who returned saying that the keepers denied having any such person in their charge. His suspicions were roused, and he went forthwith to the prison, and insisted upon seeing Jonathan Strong. He was admitted, and recognized the poor negro, now in custody as a recaptured slave. Mr. Sharp charged the master of the prison, at his own peril not to deliver up Strong to any person whatever, until he had been carried before the Lord Mayor, to whom Sharp immediately went, and obtained a summons against those persons who had seized and imprisoned Strong without a warrant. The parties appeared before the Lord Mayor accordingly, and it appeared from the proceedings that Strong's former master had already sold him to a new one, who produced the bill of sale and claimed the negro as his property. As no charge of offence was made against Strong, and as the Lord Mayor could not deal with the legal question as to Strong's liberty or otherwise, he

discharged him, and the slave followed his benefactor out of court, no one daring to touch him. The man's owner immediately gave Sharp notice of an action to recover possession of his negro slave, of whom he had been robbed; and now commenced that protracted and energetic movement in favour of the enslaved negro, which forms one of the brightest pages in English history.

About this time (1767), the personal liberty of the Englishman, though cherished as a theory, was almost daily violated. The impressment of men for the sea service was constantly practised, and, besides the press-gangs, there were regular bands of kidnappers employed in London and all the large towns of the kingdom, to seize men for the East India Company's service. And when the men were not wanted for India, they were shipped off to the planters in the American colonies. Negro slaves were openly advertised for sale in the London and Liverpool newspapers. Such was the state of matters when Granville Sharp threw himself, body and soul, into his great work. Though only a clerk in a public office, without any personal influence, and armed only with integrity and boldness in a good cause, he was enabled in the end to vindicate the personal liberty of the subject, and to establish as a fact what up to that time had been but a theory—that the slave who sets his foot on British ground becomes at that instant free!

As yet the position of the reputed slave in England was undefined and doubtful. The judgments which had been given in the courts of law were fluctuating and various, resting on no settled principle. Although it was a popular belief that no slave could breathe in England, there were legal men of great eminence who had expressed a directly contrary opinion. The lawyers to whom Mr. Sharp resorted for advice, in defending himself in the action raised against him in the case of Jonathan Strong, generally agreed with this view, and he was further told by Jonathan Strong's

owner that the eminent Lord Chief Justice Mansfield, and all the leading lawyers, were of the same opinion. Such information would have caused despair in a mind less courageous and earnest than that of Granville Sharp; but it only served to stimulate his resolution to depend mainly upon his own efforts in the arduous battle which now lay before him. "Thus forsaken," he said, "by my professional defenders, I was compelled to make a hopeless attempt at self-defence, though I was totally unacquainted with the

law, having never opened a law book in my life."

The whole of his time during the day was occupied with the business of the ordnance department, where he held the most laborious post in the office; he therefore had to pursue his new studies late at night or early in the morning. gave up every leisure moment during the next two years, to the close study of the laws of England affecting liberty,wading through an immense mass of dry literature, and making extracts of all the most important Acts of Parliament, decisions of the courts, and opinions of eminent lawyers, as he went along. In this tedious work he had no instructor, nor assistant, nor adviser. He could not find a single lawyer whose opinion was favourable to his undertaking. The results of his inquiries were, however, as gratifying to himself, as they were surprising to the gentlemen of law. thanked," he wrote, "there is nothing in any English law statute—at least that I am able to find out—that can justify the enslaving of others." He thought he now saw a clear solution of the difficulties which had embarrassed the former trials of negro cases. He had bottomed the whole inquiry, and found that a slave really could not breathe in England. He had planted his foot firm, and now he doubted nothing. He drew up the result of his studies in a plain, clear, and manly statement, entitled, On the Injustice of Tolerating Slavery in England; and numerous copies, made by himself, were circulated by him amongst the most eminent lawyers of the time. Strong's owner, finding the sort of man he had to

deal with, invented various excuses for putting off the case against Sharp, and at length offered a compromise, which was rejected. Granville went on circulating his manuscript tracts among the lawvers, until at length those employed against Jonathan Strong refused to proceed further, and the result was, that the plaintiff was compelled to pay treble costs for not bringing forward his action. The tract was then printed in 1769. This case naturally led Mr. Sharp on the study of the general subject of the Slave Trade, and he addressed a letter to the Archbishop of Canterbury imploring his grace's powerful assistance—which does not seem, however, to have been answered. In the meantime other cases occurred of the kidnapping of negroes in London, and their shipment to the West Indies for sale. An African, named Lewis, was, seized one dark night by two watermen employed by the person who claimed the negro as his property, dragged into the water, and hoisted into a boat, where he was gagged, and his limbs were tied. Then rowing down river, they put him on board a ship bound for Jamaica, where he was to be sold for a slave. The cries of the poor negro had, however, attracted the attention of some neighbours; and the next morning they went direct to Mr. Granville Sharp, now known as the negroes' friend, and informed him of the outrage. Sharp immediately got a warrant to bring back Thomas Lewis, and proceeded to Gravesend, but on arrival there he found that the ship had sailed for the Downs. writ of Habeas Corpus was obtained and sent down to Spithead; and before the ship could leave the shores of England the writ was served. The slave was found chained to the mainmast, bathed in tears; he was immediately liberated and brought back to London, and a warrant was issued against the author of the outrage. The promptitude of head, heart, and hand, displayed by Mr. Sharp in this transaction could scarcely have been surpassed. The case was tried before Lord Mansfield—whose opinion, it will be remembered, had already been expressed as decidedly opposed to that of Granville Sharp. On this occasion, Mr. Dunning, one of the counsel employed on behalf of the negro, holding up Mr. Sharp's tract in his hand, declared before the court that he was prepared to maintain "that no man can be legally detained as a slave in this country." Lord Mansfield, however, avoided offering any opinion on the legal question as to the slave's personal liberty or otherwise, but discharged the negro because the defendant could bring no evidence that Lewis was his property.

The question of the personal liberty of the negro in England was therefore still undecided; but in the meantime Mr. Sharp continued steady in his benevolent course, and rescued many more. At length the important case of James Somerset was selected, at the mutual desire of Lord Mansfield and Mr. Sharp, in order to bring the great question involved to a clear legal issue. Somerset had been brought to England by his master, and left there. Afterwards his master sought to send him off to Jamaica, for sale. Mr. Sharp, as usual, at once took the negro's case in hand, and employed a lawyer to defend him.

The cause of personal liberty, now at stake, was fairly tried befere Lord Mansfield, assisted by three justices—and tried on the broad principle of the right of erery man in England to the liberty of his person, unless forfeited by the law. It is unnecessary here to enter into any account of this great trial. At length judgment was given by Lord Mansfield, in whose powerful mind a gradual change had been worked by the arguments of counsel, based mainly on Granville Sharp's tract. He declared that the claim of slavery never can be supported; that the power claimed never was in use in England, nor acknowledged by the law; therefore the man James Somerset must be discharged. By securing this judgment Granville Sharp effectually abolished the Slave Trade until then carried on openly in the streets of Liverpool and London. But he also firmly established the glorious axiom,

that as soon as any slave sets his foot on English ground, that moment he becomes free; and there can be no doubt that this great decision of Lord Mansfield was mainly owing to Mr. Sharp's firm, resolute, and courageous prosecution of the cause from the beginning to the end.

Thomas Clarkson.

Before the death of Granville Sharp, Clarkson had already turned his attention to the question of Negro Slavery. He had even selected it for the subject of a college essay; and his mind became so possessed by it that he could not shake it off. The spot is pointed out near Wade's Mill, in Hertfordshire, where, alighting from his horse one day, he sat down on the turf by the roadside and, after long thinking, determined to devote himself wholly to the work. He translated his Essay from Latin into English, added fresh illustrations, and published it. Then fellow-labourers gathered round The Society for Abolishing the Slave Trade, unknown to him, had already been formed, and when he heard of it he joined it. He sacrificed all his fair prospects in life for this cause. Wilberforce was selected to lead in Parliament; but upon Clarkson fell the labour of collecting and arranging the immense mass of evidence offered in support of the abolition. A curious instance of Clarkson's sleuth-hound sort of preseverance may be mentioned. The supporters of slavery, in the course of their defence of the system, maintained that only such negroes as were captured in battle were sold as slaves. Clarkson knew of the slave-hunts conducted by the slavetraders, but had no witnesses to prove it. Where was one to be found? A gentleman whom he met accidentally on one of his journeys, informed him of a young sailor, in whose company he had been about a year before, who had been actually engaged in one of such slave-hunting expeditions. gentleman did not know his name, and could but vaguely describe his person. He did not know where he was, further than that he belonged to a ship of war, but at what port he

could not tell. With this mere glimmering of information, Clarkson determined to produce this man as a witness. He visited personally all the seaport towns where ships of war lay; boarded and examined every ship without success, until he came to the very last port, and found the young man, his prize, in the very last ship that remained to be visited. The young man proved to be one of his most valuable witnesses.

For some years he conducted a correspondence with upwards of four hundred persons, travelling more than thirty-five thousand miles during the same time in search of evidence. He was at length disabled by illness, brought on by his continuous exertions; but he was not borne from the field until his zeal had fully awakened the public mind, and excited the ardent sympathies of all good men on behalf of the slave.

Fowell Buxton.

After years of struggle, the slave trade was abolished. But still another great achievement remained to be accomplishedthe abolition of slavery itself throughout the British dominions. And here again determined energy won the day. Of the leaders in the cause, none was more distinguished than Fowell Buxton, who took the position formerly occupied by Wilberforce in the House of Commons. Buxton was a dull, heavy boy, distinguished for his strong self-will and violent, domineering, and headstrong obstinacy. His father died when he was a child; but fortunately he had a wise mother, who trained his will with great care, constraining him to obey, but encouraging the habit of deciding and acting for himself in matters which might safely be left to him. This mother believed that a strong will, directed upon worthy objects, was a valuable manly quality if properly guided, and she acted accordingly. When others about her commented on the boy's self-will, she would merely say, "Never mind-he is selfwilled now-you will see it will turn out well in the end." Fowell learnt very little at school, and was somewhat of a dunce and an idler. He got other boys to do his exercises for

him, while he played. He returned home at fifteen, a great, growing, awkward lad, fond only of boating, shooting, riding, and field sports-spending his time principally with the gamekeeper. Buxton had capital raw material in him, but he wanted culture, training, and development. At this point his life, when his habits were being formed for good or evil, he was happily thrown into the society of the Gurney family, distinguished for their fine social qualities, their intellectual culture, and public-spirited philanthropy. This intercourse with the Gurneys, he used afterwards to say, gave the colouring to his life. They encouraged his efforts at self-culture; and when he went to the University of Dublin, and gained high honours there, the animating passion in his mind, he said, "was to carry back to them the prizes which they promoted and enabled me to win." He married one of the daughters of the family, and started in life as a clerk to his uncles Hanbury, the London brewers. His power of will, which made him so difficult to deal with as a boy, now formed the backbone of his character, and made him most untiring and energetic in whatever he undertook. He threw his whole strength and bulk right down upon his work; and the great giant, (" Elephant Buxton " they called him, for he stood some six feet four in height) became one of the most vigorous and practical of men. "I could brew," he said, "one hour-do mathematics the next,-and shoot the next-and each with my whole soul." There was invincible energy and determination in whatever he did. Admitted a partner, he became the active manager of the concern; and the vast business which he conducted prospered far beyond its previous success. Nor did he allow his mind to lie fallow, for he gave his evenings diligently to self-culture, studying English law. His maxims in reading were, "never to begin a book without finishing it;" "never to consider a book finished until it is mastered;" and "to study everything with the whole mind."

When only thirty-two, Buxton entered parliament, and at once assumed that position of influence there, of which every

honest, earnest, well-informed man is secure. The principal question to which he devoted himself was the complete emancipation of the slaves in British colonies. He himself used to attribute the strong interest which he early felt in this question to the influence of Priscilla Gurney, one of the Earlham family -a woman of a fine intellect and warm heart, abounding in illustrious virtues. When on her deathbed, in 1821, sherepeatedly sent for Buxton, and urged him "to make the cause of the slaves the great object of his life." Her last act was to attempt to repeat the solemn charge, and she expired in the effort. Buxton never forgot her counsel; he named one of his daughters after her; and on the day on which she was married from his house, on August 1, 1834—the day of Negro emancipation-Buxton sat down and thus wrote to a friend: "The bride is just gone; everything has passed off to admiration; and there is not a slave in the British colonies!"

Buxton was no genius—not a great intellectual leader nor discoverer, but mainly an earnest, straightforward, resolute, energetic man. Indeed, his whole character is most forcibly expressed in his own words, which every young man might well stamp upon his soul: "The longer I live," said he, "the more I am certain that the great difference between men, between the feeble and the powerful, the great and the insignificant, is energy—invincible determination—a purpose once fixed, and then death or victory! That quality will do anything that can be done in this world; and no talents, no circumstances, no opportunities, will make a two-legged creature a man without it."

CHAPTER VII

MEN OF BUSINESS

"Seest thou a man diligent in his business? He shall stand before kings."-Proverbs of Solomon.

It has been a favourite fallacy with dunces of all times, that men of genius are unfitted for business, and that business unfits men for the pursuits of genius. The unhappy youth who committed suicide because he had been "born to be a man, and condemned to be a grocer," proved that his soul was not equal even to the dignity of grocery. For it is not the calling that degrades the man, but the man that degrades the calling. All work that brings honest gain is honourable, whether it be of hand or mind. The fingers may be soiled, yet the heart remain pure; for it is not material, so much as moral, dirt that defiles—greed far more than gains and vice than verdigris.

The greatest have thought it no dishonour to labour honestly and usefully for a living, though at the same time aiming at higher things Shakespeare was a successful manager of a theatre-perhaps priding himself more upon his practical qualities in that capacity than on his writing of plays and poetry. Pope was of opinion that Shakespeare's principal object in cultivating literature was to secure an honest living. Indeed he seems to have been altogether indifferent to literary reputation. It is not known that he superintended the publication of a single play, or even sanctioned the printing of one; and the chronology of his writings is still a mystery. It is certain, however, that he prospered in his business, and realized sufficient to enable him to retire in comfort to his native town of Stratford-upon-Avon. Chaucer was in early life a soldier, and afterwards a Commissioner of Customs.

and Inspector of Woods and Crown Lands. Spenser was Secretary to the Lord Deputy of Ireland, and is said to have been very shrewd and attentive in matters of business. originally a schoolmaster, became Secretary to the Council of State during the Commonwealth; and the Order-book of the Council, as well as many of Milton's letters which are preserved, give abundant evidence of his activity and usefulness in that office. Sir Isaac Newton proved himself a most efficient Master of the Mint; the new coinage of 1694 was carried on under his personal superintendence. worth and Scott-the former a distributor of stamps, the latter a clerk to the Court of Session—though great poets, were very punctual and practical men of business. Grote, the great historian of Greece, was a London banker. when John Stuart Mill, one of our greatest thinkers, retired from the Examiner's department of the East India Company, he carried with him the admiration and esteem of his fellow-officers, not on account of his high views of philosophy, but because of the high standard of efficiency which he had established in his office, and the thoroughly satisfactory manner in which he had conducted the business of his department.

The path of success in business is always the path of common sense. Notwithstanding all that is said about "lucky hits," the best kind of success in every man's life is not that which comes by accident. The only "good time coming" we are justified in hoping for, is that which we are capable of making for ourselves. The fable of the labours of Hercules is indeed the type of all human doing and success. Every youth should early be made to feel that, if he would get through the world usefully and happily, he must rely mainly upon himself. Lord Melbourne gave a piece of useful advice in a letter which he wrote to Lord John Russell, in reply to an application for a provision for one of the poet Moore's sons: "My dear John," he said, "I return you

Moore's letter. I shall be ready to do what you like about it when we have the means. I think whatever is done should be done for Moore himself. This is more distinct, direct, and intelligible. Making a small provision for young men is hardly justifiable; and it is of all things the most prejudicial to themselves. They think what they have much larger than it really is; and they make no exertion. The young should never hear any language but this: 'You have your own way to make, and it depends upon your own exertions whether you starve or not.'"

It is not good for human nature to have the road of life made too easy. Better to have to work hard and fare meanly, than to have everything done ready to our hand and a pillow of down to repose upon. Indeed, to start in life with small means seems so necessary as a stimulus to work, that it may almost be set down as one of the conditions essential to success in life. Hence an eminent judge, when asked what contributed most to success at the bar, replied, "Some succeed by great talent, some by high connexions, some by miracle, but the majority by commencing without a shilling." So is it a common saying at Manchester, that the men who are the most successful in business there are those who begin the world in their shirt sleeves; whereas those who begin with fortunes generally lose them.

Those who fail in life often conclude too hastily that every body excepting themselves has had a hand in their personal misfortunes. A literary man lately published a book in which he described his numerous failures in business, admitting, at the same time, that he was ignorant of the multiplication table, probably because he would not take the trouble to learn it. But, instead of attributing his failures to himself, this man sat down deliberately to cast all the blame upon the money-worshipping spirit of the age. Lamartine also did not hesitate to profess his profound contempt for arithmetic; but, had it been less, probably we should not have witnessed the

unseemly spectacle of the admirers of that distinguished personage engaged in collecting subscriptions for his support in his old age.

There is a Russian proverb which says that Misfortune is next door to Stupidity; and it will generally be found that men who are constantly lamenting their ill-luck, are only reaping the consequences of their own neglect, mismanagement, improvidence, or want of application. Dr. Johnson, who came up to London with a single guinea in his pocket, and who once accurately described himself in his signature to a letter addressed to a noble lord as *Impransus*, or Dinnerless, has honestly said, "All the complaints which are made of the world are unjust; I never knew a man of merit neglected; it was generally by his own fault that he failed of success."

Attention, application, accuracy, method, punctuality, and despatch, are the principal qualities required for the efficient conduct of business of any sort. These, at first sight, may appear to be small matters; and yet they are of essential importance to human happiness, well-being, and usefulness. They are little things, it is true; but human life is made up of little things. It is the repetition of little acts which not only make up the sum of human character, but also determine the character of nations. And where men or nations have broken down, it will almost always be found that neglect of little things was the rock on which they split.

The examples we have already given of great workers in various branches of industry, art, and science, make it unnecessary further to enforce the importance of persevering application in any department of life. It is the result of every-day experience, that steady attention to matters of detail lies at the root of human progress; and that diligence, above all, is the mother of good luck. Accuracy is also of much importance, and an invariable mark of good training in a manaccuracy in observation, accuracy in speech, accuracy in the

transaction of affairs. What is done in business must be well done; for it is better to accomplish perfectly a small amount of work, than to half-do ten times as much. A wise man used to say, "Stay a little, that we may make an end the sooner."

Too little attention, however, is paid to this highly important quality of accuracy. As a man eminent in practical science lately observed to us, "It is astonishing how few people I have met with in the course of my experience, can define a fact accurately." Yet, in business affairs, it is the manner in which even small matters are transacted, that often decides men for or against you. With virtue, capacity, and good conduct in other respects, the person who is habitually inaccurate cannot be trusted; his work has to be gone over again; and he thus causes annoyance, vexation, and trouble.

Method is essential, and enables a larger amount of work to be got through with satisfaction. "Method," said Cecil (afterwards Lord Burleigh), "is like packing things in a box: a good packer will get in half as much again as a bad one." Cecil's despatch of business was extraordinary, his maxim being, "The shortest way to do many things is to do only one thing at once;" and he never left a thing undone with a view of returning to it at a period of more leisure. When business pressed, he rather chose to encroach on his hours of meals and rest than omit any part of his work. De Witt's maxim was like Cecil's: "One thing at a time." "If," said he, "I have any necessary despatches to make. I think of nothing else till they are finished; if any domestic affairs require my attention. I give myself wholly up to them till they are set in order." Despatch comes with practice. A French minister, who was alike remarkable for his despatch of business and his constant attendance at places of amusement, being asked how he contrived to combine both objects, replied, "Simply by never postponing till to-morrow what should be done to-day." Lord Brougham has said that a certain English states nan reversed

the process, and that his maxim was, never to transact to-day what could be postponed till to-morrow. Unhappily, such is the practice of many besides that minister, already almost forgotten; the practice is that of the indolent and the unsuccessful. Such men, too, are apt to rely upon agents, who are not always to be relied upon. Important affairs must be attended to in person. "If you want your business done," says the proverb, "go and do it; if you don't want it done, send some one else." An indolent country gentleman had a freehold estate producing about five hundred pounds a year. Becoming involved in debt, he sold half the estate, and let the remainder to an industrious farmer for twenty years. About the end of the term the farmer called to pay his rent, and asked the owner whether he would sell the farm. "Will you buy it?" asked the owner, surprised. "Yes, if we can agree about the price." "That is exceedingly strange," replied the gentleman; "pray, tell me how it happens that, while I could not live upon twice as much land for which I paid no rent, you are regularly paying me two hundred a year for your farm, and are able, in a few years, to purchase it." "The reason is plain," was the reply: "vou sat still and said Go, I got up and said Come; you lay in bed and enjoyed your estate, I rose · in the morning and minded my business."

Men of business are accustomed to quote the maxim that Time is money; but it is much more. The proper use of time is self-culture, self-improvement, and growth of character. An hour wasted daily on trifles or in indolence would, if devoted to self-improvement, make an ignorant man wise in a few years and, employed in good works, would make his life fruitful. Fifteen minutes a day devoted to self-improvement, will be felt at the end of the year. Good thoughts and carefully gathered experience take up no room, and are carried about with us as companions everywhere, without cost or incumbrance. An economical use of time is the true way of securing leisure: it enables us to get through business and

carry it forward, instead of being driven by it. On the other hand, the miscalculation of time involves us in perpetual hurry, confusion, and difficulties: and life becomes a mere shuffle of expedients, usually followed by disaster. Nelson once said, "I owe all my success in life to having been always a quarter of an hour before my time."

Some take no thought of the value of money until they have come to an end of it, and many do the same with their time. The hours are allowed to flow by unemployed, and then, when life is fast waning, they think of the duty of making a wiser use of it. But the habit of listlessness and idleness may already have become confirmed, and they are unable to break the bonds with which they have permitted themselves to become bound. Lost wealth may be replaced by industry, lost knowledge by study, lost health by temperance or medicine; but lost time is gone for ever.

A proper consideration of the value of time will also inspire habits of punctuality. "Punctuality," said Louis XIV "is the politeness of kings." It is also the duty of gentlemen, and the necessity of men of business. Nothing begets confidence in a man sooner than the practice of this virtue, and nothing shakes confidence sooner than the want of it. He who keeps his appointment and does not keep you waiting for him, shows that he has regard for your time as well as for his own. Thus punctuality is one of the ways by which we show our personal respect for those whom we are called upon to meet in the business of life. It is also conscientiousness, in a measure; for an appointment is a contract, express or implied, and he who does not keep it breaks faith, as well as dishonestly uses other people's time, and thus loses character. We naturally come to the conclusion that the person who is careless about time will be careless about business, and that he is not the one to be trusted with the transaction of matters of importance. When Washington's secretary excused himself for the lateness of his attendance and laid the blame upon his

watch, his master quietly said, "Then you must get another watch, or I another secretary."

The unpunctual man is a general disturber of others' peace. Everybody with whom he has to do is thrown from time to time into a state of fever; he is systematically late: regular only in his irregularity. He conducts his dawdling as if upon a system; always arrives at his appointment after time; gets to the railway station after the train has started; and posts his letter when the box has closed. Business is thus thrown into confusion, and everybody concerned is put out of temper. It will generally be found that the men who are thus habitually behind time are as habitually behind success; and the world generally casts them aside to swell the ranks of the grumblers and the railers against fortune.

In addition to these ordinary working qualities, the business man of the highest class requires sound discretion, quick perception, and firmness in the execution of his plans. Business tact is also important; and though this is partly the gift of nature, it is yet capable of being developed by observation and experience. Men of this quality are quick to see the right mode of action, and, if they have decision of purpose, are prompt to carry out their undertakings to a successful issue. Such men gave a new life to industry; they put their character into every work that they enter upon, and are among the most powerful agents in the progress of society in all times.

The truth of the good old maxim, that "Honesty is the best policy," is upheld by the daily experience of life; uprightness and integrity being found as successful in business as in everything else. As Hugh Miller's worthy uncle used to advice him, "In all your dealings give your neighbour good measure, heaped up, and running over '—and you will not lose by it in the end." A well-known brewer of beer attributed his success to the liberality with which he used his malt. Going up to the vat and tasting it, he would say,

"Still rather poor, my lads; give it another cast of the malt." The brewer put his character into his beer, and it proved generous accordingly, obtaining a reputation in England, India, and the colonies, which laid the foundation of a large fortune. Integrity of word and deed ought to be the very corner-stone of all business transactions. To the tradesman, the merchant, and manufacturer, it should be what honour is to the soldier, and charity to the Christian. In the humblest calling there will always be found scope for the exercise of this uprightness of character. Hugh Miller speaks of the mason with whom he served his apprenticeship, as one who " put his conscience into every stone that he laid." So the true mechanic will pride himself upon the thoroughness and solidity of his work, and the high-minded contractor upon the honesty of the performance of his contract in every particular. The upright manufacturer will find not only honour and reputation, but substantial success, in the genuineness of the article which he produces, and the merchant in the honesty of what he sells. Baron Dupin, speaking of the general honesty of Englishmen, which he held to be a principal cause of their success, observed, "We may succeed for a time by fraud, by surprise, by violence; but we can succeed permanently only by means direcly opposite. It is not alone the courage, the intelligence, the activity, of the merchant and manufacturer which maintain the superiority of their productions and the character of their country; it is far more their wisdom, their economy, and, above all, their probity. If ever in the British Islands the useful citizen should lose these virtues, we may be sure that, for England, as for every other country, the vessels of a degenerate commerce, repulsed from every shore, would speedily disappear from those seas whose surface they now cover with the treasures of the universe, bartered for the treasures of the industry of the three kingdoms."

It must be admitted, that Trade tries character perhaps more severely than any other pursuit in life. It puts to the

severest tests honesty, self-denial, justice, and truthfulness; and men of business who pass through such trials unstained are perhaps worthy of as great honour as soldiers who prove their courage amidst the fire and perils of battle. And, to the credit of the multitudes of men engaged in the various departments of trade, we think it must be admitted that on the whole they pass through their trials nobly. If we reflect but for a moment on the vast amount of wealth daily intrusted even to subordinate persons, who themselves probably earn but a bare living—the loose cash which is constantly passing through the hands of shopmen, agents, brokers, and clerks in banking houses-and note how comparatively few are the breaches of trust which occur amidst all this temptation, it will probably be admitted that this steady daily honesty of conduct is most honourable to human nature. The same trust and confidence reposed by men of business in each other, as is implied by the system of credit, which is mainly based upon the principle of honour, would be surprising if it were not so much a matter of ordinary practice in business trans-Dr. Chalmers has well said, that the implicit trust with which merchants are accustomed to put in distant agents, separated from them perhaps by half the globe is probably the finest act of homage which men can render to one another.

Although common honesty is still happily in the ascendant amongst common people, and the general business community of England is still sound at heart, putting their honest character into their respective callings, there are unhappily, as there have been in all times, but too many instances of dishonesty and fraud, on the part of the unscrupulous, the over-speculative, and the intensely selfish, in their haste to be rich. There are tradesmen who adulterate, contractors who "scamp," manufacturers who give us shoddy instead of wool, "dressing" instead of cotton, cast-iron tools instead of steel, needles without eyes, razors made only "to sell," swindled fabrics in many shapes. But these we must

hold to be the exceptional cases, of low minded and grasping men, who, though they may gain wealth will never gain an honest character, nor secure that without which wealth is nothing—a satisfied conscience. "The rogue cozened not me, but his own conscience," said Bishop Latimer of a cutler who made him pay two pence for a knife not worth a penny. Money earned by screwing, cheating, and overreaching, may for a time dazzle the eyes of the unthinking; but the bubbles blown by unscrupulous rogues, when full-blown, usually glitter only to burst. Swindlers, for the most part, come to a sad end even in this world; and though the successful swindlers of others may not be "found out," and the gains of their roguery may remain with them, it will be as a curse and not as a blessing.

It is possible that the scrupulously honest man may not grow rich so fast as the unscrupulous and dishonest one; but the success will be of a truer kind, earned without fraud or injustice. And even though a man should for a time be unsuccessful, still he must be honest: better lose all and save character. For character is itself a fortune; and if the high-principled man will but hold on his way courageously, success will surely come—nor will the highest reward of all be withheld from him. Wordsworth well describes the "Happy Warrior," as he

"Who comprehends his trust, and to the same Keeps faithful with a singleness of aim; And therefore does not stoop, nor lie in wait For wealth, or honour, or for worldly state; Whom they must follow, on whose head must fall, Like showers of manna, if they come at all"

CHAPTER VIII

MONEY-ITS USE AND ABUSE

"Neither a borrower nor a lender be;
For loan oft loses both itself and friend;
And borrowing dulls the edge of husbandry."—Shakespeare.

How a man uses money-makes it, saves it, and spends it—is perhaps one of the best tests of his practical wisdom. Although money ought by no means to be regarded as the chief end of man's life, it is not a trifling matter to be held in contempt, representing as it does to so large an extent the means of physical comfort and social well-being. Indeed, some of the finest qualities of human nature are related to the right use of money, such as generosity, honesty, justice, and self-sacrifice; as well as the practical virtues of economy and providence. On the other hand, there are their counterparts-avarice, fraud, injustice, and selfishness, as displayed by lovers of gain; and the vices of thriftlessness, extravagance, and improvidence. "So that," as one wisely observed "a right measure and manner in getting, saving, spending, giving, taking, lending, borrowing, and bequeathing, would almost argue a perfect man."

Comfort in worldly circumstances is a condition which every man is justified in striving to attain by all worthy means. It secures that physical satisfaction which is necessary for the culture of the better part of his nature; and enables him to provide for those of his own household. Moreover the very effort required to succeed in life with this object, is of itself an education; stimulating a man's sense of self-respect, bringing out his practical qualities, and disciplining him in the exercise of patience, perseverance, and such like virtues. The provident and careful man must be a

thoughtful man, for he lives not merely for the present, but also to make arrangements for the future. He must also be a temperate man, and exercise the virtue of self-denial, which more than anything else gives strength to the character. John Sterling says truly, that "the worst education which teaches self-denial, is better than the best which teaches everything else, and not that."

Any class of men that lives from hand to mouth will ever be an inferior class. They will necessarily remain powerless and helpless, hanging on to the skirts of society, the sport of times and seasons. Having no respect for themselves, they will fail in securing the respect of others. In commercial crises, such men must inevitably go to the wall. Lacking that husbanded power which a store of savings, no matter how small, gives them, they will be at every man's mercy, and, if possessed of right feelings, they cannot but regard with fear and trembling the future possible fate of their wives and children. "The world," once said Mr. Cobden to the working men of Huddersfield, "has always been divided into two classes—those who have saved, and those who have spent—the thrifty and the extravagant. The building of all the houses, the mills, the bridges, and the ships, and the accomplishment of all other great works which have rendered man civilized and happy, has been done by the savers, the thrifty; and those who have wasted their resources have always been their slaves. It has been the law of nature and of Providence that this should be so; and I were an impostor if I promised any class that they would advance themselves if they were improvident, thoughtless, and idle."

Every man ought to manage to live within his means. This practice is of the very essence of honesty. For if a man do not manage honestly to live within his own means, he must be living dishonestly upon the means of somebody else. Those who are careless about personal expenditure, and consider merely their own gratification, generally find out the

real uses of money when it is too late. Though by nature generous, these thriftless persons are often driven in the end to do very shabby things. They dawdle with their money as with their time; draw bills upon the future; anticipate their earnings; and are thus under the nedessity of dragging after them a load of debts which seriously affects their action as free and independent men. The loose sash which many persons throw away uselessly, would often form a basis of fortune and independence for life. These wasters are their own worst enemies, though generally found amongst the ranks of those who rail at the injustice of "the world." But if a man will not be his own friend, how can he expect that others will? Orderly men of moderate means have always something left in their pockets to help others; whereas prodigal and careless fellows who spend all, never find an opportunity for helping anybody. It is poor economy, however, to be a Narrowmindedness in living and in dealing is generally short-sighted, and leads to failure. The penny soul, it is said, never came to two-pence. Generosity and liberality, like honesty, prove the best policy after all.

The proverb says that "an empty bag cannot stand upright"; neither can a man who is in debt. Debt makes everything a temptation. It lowers a man in self-respect, places him at the mercy of his tradesman and his servant, and renders him a slave in many respects, for he can no longer call himself his own master, nor boldly look the world in the face. It is also difficult for a man who is in debt to be truthful; hence it is said that lying rides on debt's back. The debtor has to frame excuses to his creditor for postponing payment of the money he owes him; and probably also to contrive falsehoods. It is easy enough for a man who will exercise a healthy resolution, to avoid incurring the first obligation; but the ease with which that has been incurred often becomes a temptation to a second; and very soon the unfortunate borrower becomes so entangled that no late

exertion of industry can set him free. The first step in debt is like the first step in falsehood; debt follows debt, as lie Havdon, the painter, dated his decline from the follows lie. day on which he first borrowed money. He realized the truth of the proverb, "Who goes a-borrowing, goes asorrowing." The significant entry in his diary is: "Here began debt and obligation, out of which I have never been and never shall be extricated as long as I live." His Autobiography shows but too painfully how embarrassment in money matters produces distress of mind, utter incapacity for work, and constantly recurring humiliations. The written advice which he gave to a youth when entering the navy was as follows: "Never purchase any enjoyment if it cannot be procured without borrowing of others. Never borrow money: it is degrading. I do not say never lend, but never lend if by lending you render yourself unable to pay what you owe; but under any circumstances never borrow."

Dr. Johnson held that early debt is ruin. "Do not," said he, "accustom yourself to consider debt only as an inconvenience; you will find it a calamity. Poverty takes away so many means of doing good, and produces so much inability to resist evil, both natural and moral, that it is by all virtuous means to be avoided. . . . Let it be your first care, then, not to be in any man's debt. Resolve not to be poor; whatever you have, spend less. Poverty is a great enemy to human happiness; it certainly destroys liberty, and it makes some virtues impracticable and others extremely difficult. Frugality is not only the basis of quiet, but of beneficence. No man can help others that wants help himself; we must have enough before we have to spare."

It is the bounden duty of every man to look his affairs in the face, and to keep an account of his incomings and outgoings in money matters. The exercise of a little simple arithmetic in this way will be found of great value. Prudence requires that we shall live below our means, rather than up

to them; but this can only be done by carrying out faithfully a plan of living by which both ends may be made to meet. John Locke strongly advised this course: "Nothing," said he, "is likelier to keep a man within compass than having constantly before his eyes the state of his affairs in a regular course of account." The Duke of Wellington kept an accurate detailed account of all the monies received and expended by him.

It is a great point for young men to begin well: for it is in the beginning of life that that system of conduct is adopted. which soon assumes the force of Habit. Begin well, and the habit of doing well will become quite as easy as the habit of doing badly. Well-begun is half ended, says the proverb: and a good beginning is half the battle. Many promising young men have fatally injured themselves by a first false step at the commencement of life; while others, of much less promising talents, have succeeded simply by beginning well, and going onward. The good practical beginning is, to a certain extent, a pledge, a promise, and an assurance, of the ultimate prosperous issue. There is many a poor creature now crawling through life, miserable himself and the cause of sorrow to others, who might have lifted up his head and prospered, if, instead of merely satisfying himself with resolutions of welldoing, he had actually gone to work and made a good practical beginning.

Too many are, however, impatient of results. They are not satisfied to begin where their fathers did, but where they left off. They think to enjoy the fruits of industry without working for them. They cannot wait for the results of labour and application, but forestall them by too early indulgence. A worthy Scotch couple, when asked how their son had broken down so early in life, gave the following explanation: "When we began life together, we worked hard, and lived upon porridge and such like, gradually adding to our comforts as our means improved, until we were able at length to dine

off a bit of roast meat and sometimes a boiled fowl: but as for Jock, our son, he began where we had left off—he began with the fowl first."

Many have the dreadful ambition to be "genteel." keep up appearances, too often at the expense of honesty; and, though we may not be rich, yet we must seem to be so. must be "respectable." though only in the meanest sense—in mere vulgar outward show. We have not courage to go patiently onward in the condition of life in which it has pleased God to call us; but must needs live in some fashionable state to which we ridiculously please to call ourselves, and all to gratify the vanity of that unsubstantial genteel world of which we form a part. There is a constant struggle for front seats in the social theatre; in the midst of which all noble self-denying resolve is trodden down, and many fine natures are crushed to death. What waste, what misery, what bankruptcy, come from all this ambition to dazzle others with the glare of apparent worldly success, we need not describe. The mischievous results show themselves in a thousand ways-in the rank frauds committed by men who dare to be dishonest, but do not dare to seem poor; and in the desperate dashes at fortune, in which the pity is not so much for those who fail, as for the hundreds of innocent families who are so often involved in their ruin.

Many popular books have been written for the purpose of telling the public the grand secret of making money. But there is no secret whatever about it, as the proverbs of every nation abundantly testify. "Many a little makes a muckle."—"Take care of the pennies and the pounds will take care of themselves."—"A penny saved is a penny gained."—"Diligence is the mother of good luck."—"No pains, no gains."—"No sweat, no sweet."—"Sloth, the key of poverty."—"Work, and thou shalt have."—"He who will not work, neither shall he eat."—"The world is his, who has patience and industry."—"It is too late to spare when all is spent."—"

"Better go to bed supperless than rise in debt."-" The morning hour has gold in its mouth."—Such are specimens of the proverbial philosophy, embodying the hoarded experience of many generations, as to the best means of thriving in the They were current in people's mouths long before books were invented; and like other popular proverbs, they were the first codes of popular morals. Moreover they have stood the test of time, and the experience of every day still bears witness to their accuracy, force, and soundness. proverbs of Solomon are full of wisdom, as to the force of industry, and the use and abuse of money:-"He that is slothful in work is brother to him that is a great waster."-"Go to the ant, thou sluggard; consider her ways and be wise." Poverty, he says, shall come upon the idler, "as one that travaileth, and want as an armed man;" but of the industrious and upright, "The hand of the diligent maketh rich."-" He who will not plough by reason of the cold, shall beg in harvest, and have nothing."-"The drunkard and the glutton shall come to poverty; and drowsiness shall clothe a man with rags." -"The slothful man says there is a lion in the streets."-"Seest thou a man diligent in his business? he shall stand before kings."—But above all, "It is better to get wisdom than gold; for wisdom is better than rubies, and all the things that may be desired are not to be compared to it."

Simple industry and thrift will go far towards making any person of ordinary ability independent in his means. Even a working man may be so, provided he will carefully husband his resources, and watch the little outlets of useless expenditure. A penny is a very small matter, yet the comfort of thousands of families depends upon the proper spending and saving of pennies. If a man allows the little pennies, the results of his hard work, to slip out of his fingers—some this way and some that—he will find that his life is little raised above one of more animal drudgery. On the other hand, if he take care of the pennies—putting some weekly into a benefit

society or an insurance fund, others into a savings bank, and confiding the rest to his wife to be carefully laid out on the comfortable maintenance and education of his family—he will soon find his reward in increasing means, growing comfort at home, and a mind comparatively free from fears as to the future. If a working man have high ambitions and possess richness in spirit—a kind of wealth which far transcends all mere worldly possessions—he may not only help himself, but be a profitable helper of others in his path through life. this is no impossible thing even for a common labourer in a workshop, may be illustrated by the remarkable career of Thomas Wright, of Manchester, whose life affords only another proof of the power of patient perseverance in well-doing, and of the influence which even the humblest person, who is diligent in improving his opportunities, may exercise for the advantage of his fellow-creatures.

It was scarcely to have been expected, that one of the most difficult and apparently impossible of things, the reclamation of criminals, should have been not only attempted, but accomplished, by a man working for weekly wages in a foundry! Yet his work was done by Thomas Wright when employed with the Messrs. Ormerod, at Manchester. Accident first directed his attention to the difficulty experienced by liberated convicts in returning to habits of honest industry. His mind was possessed by the subject; and to remedy the evil became the purpose of his life. He did not neglect his work, for he honourably performed his duties as a foundryman, and his working and business qualities were so highly prized by his employers, that he was gradually raised to the post of foreman of his shop. Nor did he neglect his family. for, upon comparatively small means, he respectably brought up a large family. Though he worked from six in the morning till six at night, still there were leisure minutes that he could call his own-more especially his Sundays-and these he employed in the service of convicted criminals; a class then

far more neglected than they are now. But a few minutes a day, well employed, can effect a great deal; and in ten years this working man, by stead-fastly holding to his purpose, succeeded in rescuing not fewer than three hundred felons from continuance in a life of villany! He came to be regarded as the moral physician of the Manchester prison; and when the Chaplain and all others failed, Thomas Wright often succeeded. Children he thus restored healed to their parents; sons and daughters otherwise lost, to their homes; and many a returned convict did he enable to settle down to honest pursuits. task was by no means easy. It required money, time, energy, prudence, and above all, character, and the confidence which character invariably inspires. The most remarkable circumstance of all is, that Wright relieved many of these poor outcasts out of the comparatively small wages earned by him at foundry work. He did all this on an income which did not average, during his working career, £100 per annum: and yet, while he was able to bestow substantial aid on criminals, he also maintained his own family in comfort, and was, by frugality and carefulness, enabled to lay by a store of savings against his approaching old age. Every week he apportioned his income with deliberate caro; so much for the necessaries of food and clothing, so much for the landlord, so much for the schoolmaster, so much for the poor and needy. By such means did this humble workman pursue his great work, with the results we have so briefly described. career affords one of the most striking illustrations of the force of purpose in a man, of the might of small means carefully applied, and, above all, of the power which an energetic and upright character exercises upon the lives and conduct of others.

The saving of money for the mere sake of it, is but a mean thing, even though the money is earned by honest work; but where it is earned by dice-throwing, or speculation, and without labour, it is still worse. To provide for others and

for our own comfort and independence in old age, is honourable, but to hoard for mere wealth's sake is the characteristic of the narrow-souled and the miserly. It is against the growth of this habit of miserly saving, that the wise man needs most carefully to guard himself: else, what in youth was simple economy, may in old age grow into avarice. It is the love of money—not money itself—which is "the root of evil," a love which narrows the soul, and closes it against generous life and action. Hence, Sir Walter Scott makes one of his character declare that " the silver peeny slew more souls than the naked sword slew bodies." It is one of the defects of business too exclusively followed, that it tends to a mechanism of character. The business man gets into a rut, and often does not look beyond it. If he lives for himself only, he becomes apt to regard other human beings only in so far as they minister to his ends. Take a leaf from such men's ledgers, and you have their life. It is said of one of our most eminent modern men of business—a scrupulously honourable man-who spent his life mainly in money-making and succeeded, that when he was upon his death-bed he turned to his favourite daughter, and said solemnly to her "Hasn't it been a mistake? " He had been thinking of the good which other men had dene for others, and which he might have done.

Worldly success, measured by the accumulation of money, is no doubt a very dazzling thing; and all men are naturally more or less the admirers of worldly success. But though men of persvering, sharp, dexterous, and unscrupulous habits, ever on the watch to push opportunities, may and do "get on" in the world, yet it is quite possible that they may not possess the slightest elevation of character, nor a particle of real greatness. He who recognizes no higher logic than that of the shilling, may become a very rich man, and yet remain all the while an exceedingly poor creature. For riches are no proof whatever of moral worth; and their glitter often

serves only to draw attention to the worthlessness of their possessor, as the glow-worm's light reveals the grub. "In morals," says Mr. Lynch, "a penny may outweigh a pound—may represent more industry and character. The money that witnesses to patient, inventive years of fair dealing and brave dealing, proves 'worth' indeed. But neither a man's means nor his worth are measurable by his money. If he has a fat purse and a lean heart, a broad estate and a narrow understanding, what will his 'means' do for him—what will his 'worth' gain him?" Let a man be what he will, it is the mind and heart that make a man poor or rich, miserable or happy; for these are always stronger than fortune."

The power of money is on the whole over-estimated. The greatest thing which have been done for the world have not been accomplished by rich men, nor by subscription lists, but by men of small pecuniary means. Christianity was propagated over half the world by men of the poorest class; and the greatest thinkers, discoverers, inventors, and artists, have been men of moderate wealth, many of them little raised above the condition of manual labourers. And it will always be so. Riches are oftener an impediment than a stimulus to action; and in many cases they are quite as much a misfortune as a blessing. The youth who inherits wealth is apt to have life made too easy for him, and he soon grows sated with it, because he has nothing left to desire. Having no special object to struggle for, he finds time hang heavy on his hands; and he remains morally and spiritually asleep.

Yet the rich man, inspired by a right spirit, will spurn idleness as unmanly; and if he realises the responsibilities which attach to the possession of wealth and property, he will feel even a higher call to work than men of poorer lot. This, however, must be admitted to be by no means the practice of life. The golden mean of Agur's perfect prayer is, perhaps, the best lot of all, if we did but know it: "Give me neither poverty nor riches; feed me with food convenient

for me." The late Joseph Brotherton left a fine motto to be recorded upon his monument in the Peel Park, Manchester—"My richness consisted not in the greatness of my possessions, but in the smallness of my wants." He rose from the humblest station, that of a factory boy, to an eminent position of usefulness, by homely honesty, industry, punctuality and self-denial.

"Respectability," in its best sense, is good. The respectable man is one worthy of regard, literally worth turning back to look at. But the respectability that consists in merely keeping up appearances is not worth looking at in any sense. Far better and more respectable is the good poor man than the bad rich one-better the humble silent man than the agreeable rogue who keeps his carriage. A well-balanced and well-stored mind, a life full of useful purpose, whatever the position occupied in it may be, is of far greater importance than average worldly respectability. The highest object of life is to form a manly character, and to work out the best development possible, of body and spirit-of mind, conscience, heart and soul. This is the end: all else ought to be regarded but as the means. Accordingly, that is not the most successful life in which a man gets the most pleasure, the most money, the most power or place, honour or fame; but that in which a man gets the most manhood, and performs the greatest amount of useful work and of human duty. Money is power after its sort, it is true; but intelligence, public spirit, and moral virtue, are powers too, and far noble ones.

CHAPTER IX

SELF-CULTURE

- "Every person has two educations, one which he receives from others, and one, more important, which he gives to himself."—Gibbon.
- "These two things, contradictory as they may seem, must go together—manly dependence and manly independence, manly reliance, and manly self-reliance."—Wordsworth.

"The best part of every man's education," said Sir Walter Scott, "is that which he gives to himself." The education received at school or college is but a beginning, and is valuable chiefly because it trains the mind and makes it accustomed to continuous application and study. That which is put into us by others is always far less ours than that which we acquire by our own efforts. Knowledge conquered by labour becomes a possession—a property entirely our own. Our own active effort is the essential thing; and no facilities, no books, no teachers, no amount of lessons learnt by rote, will enable us to do without it.

The best teachers have always emphasised the importance of self-culture, and of stimulating the student to gain knowledge by the exercise of his own faculties. They have relied more upon training than upon telling, and have tried to make their pupils active partners in the work of their own education, but not mere passive receivers of information. This was the spirit in which Dr. Arnold, the great Head-Master of Rugby, worked; he strove to teach his pupils to rely on themselves and develop their powers by their own active efforts, he himself merely guiding, directing, stimulating and encouraging them.

However poor a man may be, however lowly his station, he can, if he will, always do something towards educating himself. The number of men of humble station who have risen to distinction in science and literature, proves that labour can go along with the highest intellectual culture. Work in moderation is healthy, as well as agreeable to the human constitution. Work educates the body, as study educates the mind; and that is the best state of society in which there is some work for every man's leisure, and some leisure for every man's work. This is an advantage which the working classes, strictly so called, certainly possess over the leisured classes-that in early life they have to apply themselves laboriously to some mechanical pursuit or other, thus acquiring manual dexterity and the use of their physical powers. The chief disadvantage of the labouring classes is, not that they are employed in physical work, but that they are too exclusively so employed, often to the neglect of their moral and intellectual faculties. While the youths of the leisured classes, having been taught to regard labour as servile, grow up ignorant in practical affairs, the power classes, confining themselves to manual labour, have been allowed to grow up illiterate. It seems possible, however, to avoid both these evils by combining physical work or physical training with intellectual culture; and there are signs that a healthier system of education of this sort will be adopted. The training of young men in the use of tools would not only educate them in "common things," but would also teach them the use of their hands and arms, familiarise them with healthy work, give them some practical acquaintance with mechanics, and train them in the habit of persevering physical effort.

The use of early labour in self-imposed mechanical employments is illustrated by the boyhood of Sir Isaac Newton. Though a comparatively dull scholar, he was most assiduous in the use of his saw, hammer, and hatchet—"knocking and

hammering in his lodging-room"-making models of windmills, carriages, and machines of all sorts; and as he grew older, he took delight in making little tables and cupboards for his friends. Smeaton, Watt, and Stephenson, were equally handy with tools when mere boys; and but for such kind of self-culture in their wouth, it is doubtful whether they would have accomplished so much in their manhood. was also the early training of the great inventors and mechanics described in the preceding pages, whose contrivance and intelligence were practically trained by the constant use of their hands in early life. Even where men belonging to the manual labour class have risen above it, and become more purely intellectual labourers, they have found the advantages of their early training in their later pursuits. Elihu Burritt even found hard labour necessary to enable him to study with effect; and more than once he gave up school-keeping and study, and, taking to his leather apron again, went back to his blacksmith's forge and anvil, for his health of body and mind's sake.

The same view was well urged by Mr. R. M. Milnes, M. P., at a recent meeting of a mechanics' institute. "He believed," he said, "that the habit of mechanical workprecise, earnest, industrious, good, mechanical work-would best lead men on to good mental and intellectual work. good workman in the materials of life would, if he had the talent, be a good workman in the materials of the mind; and thus it was that they found that the most remarkable men who had risen from the lower ranks of society, had not risen from those who had abstained from work, but from those who had been the most industrious, the most active, and the most intelligent in their own mechanical occupations. There were two things which operated against young men advancing in intellectual progress—over-work and under-work. He thought it no disadvantage whatever to a man's intellectual progress to have something else to do; and if they looked at the upper classes of society they would find it was equally true in their case as it was in their own—namely, that the man who had the most active occupation was the man who in public life the most distinguished himself, and became the most useful to his country."

Mental self-culture always means hard work and sustained application. It is as foolish to expect to acquire self-culture without labour, as to look for a harvest where the seed has not been sown. The road into knowledge is free to all, who will give the labour and study necessary; and there are no difficulties so great that the student of resolute purpose cannot over-Sir Joshua Reynolds, as we have already pointed out, was so earnest a believer in the power of industry, that he held that all men might achieve excellence by earnest and patient working. He held that drudgery was on the road of genius, and there were no limits to the proficiency of an artist except the limits of his own pains-taking. He would not believe in what is called inspiration, but only in study and labour. "Excellence," he said, "is never granted to man but as the reward of labour." "If you have great talents, industry will improve them; if you have but moderate abilities. industry will supply their deficiency. Nothing is denied to well-directed labour; nothing is to be obtained without it."

There is no want of desire on the part of most persons at this day to arrive at the results of self-culture, but there is a great aversion to pay the necessary price for it, namely, hard work. Dr. Johnson held that "impatience of study was the mental disease of the present generation"; and the remark still holds true. We may not believe that there is a royal road to learning, but we seem to believe very firmly in a "popular" one. In education, we invent labour-saving processes, seek short cuts to science, learn French and Latin "in twelve lessons," or "without a master." We resemble the lady of fashion, who engaged a master to teach her a language

on condition that he did not plague her with verbs and participles. We get our smattering of science in the same way; we learn chemistry by listening to a short course of lectures enlivened by experiments, and when we have inhaled laughing gas, seen green water turned to red, and phosphorus burnt in oxygen, we have got our smattering, of which the most that can be said is that, though it may be better than nothing, it is yet good for nothing. Thus we often imagine we are being educated while we are only being amused.

But it will not do: all such labour-saving processes-indeed, all pretended methods of insinuating knowledge into the mind without study and labour-are delusive, and end only in disappointment. To be wise we must diligently apply ourselves, and use the same continuous application which our forefathers did; for labour is still, and ever will be, the price set upon everything which is valuable. We must be satisfied to work energetically with a purpose, and wait the results with patience. Buffon has even said of patience, that it is genius -the power of great men, in his opinion, consisting mainly in their power of continuous working and waiting. All progress, of the best kind, is slow; but to him who works faithfully and in a right spirit, be sure that the reward will be given in its own good time. "Courage and industry," says Sharpe, "must have sunk in despair, and the world must have remained unimproved, if men had merely compared the effect of a single stroke of the chisel with the pyramid to be raised, or of a single impression of the spade with the mountain to be develled." We must continuously apply ourselves to right pursuits, and we cannot fail to advance steadily, though it may be unconsciously. By degrees, the spirit of industry, exercised in the common forms of education, will be transferred to objects of greater dignity and more extensive usefulness. And still we must work on; for the work of self-culture is never finished. "To be employed," said the poet Gray, "is to be happy." "It is better to wear out than rust out," said

Bishop Cumberland. "Have we not all eternity to rest in?" exclaimed Arnauld.

Thoroughness and accuracy are two principal points to be aimed at in study. Francis Hornor, in laying down rules for the cultivation of his mind and character, placed great stress upon the habit of continuous application to one subject for the sake of mastering it thoroughly; confining himself, with this object, to but a few books, and resisting with the greatest firmness "every approach to a habit of desultory reading," The value of knowledge to any man certainly does not consist in its quantity, but mainly in the good uses to which he may apply it. Hence a little knowledge of an exact and perfect character, is always found more valuable for practical purposes than any extent of superficial learning. We talk of "the spread of knowledge" in these days, but I fear the knowledge is spread so widely, and in such thin layers, that it only serves to reveal the mass of ignorance lying beneath. Never perhaps were books more extensively read, or less studied; and the number is rapidly increasing of those who know a little of everything, but nothing well. Such readers have been likened to a certain sort of pocket-knife which some people carry about with them, which, in addition to a common knife, contains a file, a chisel, a saw, a gimlet, a screw-driver, and a pair of scissors, but all so small that the moment they are needed for use, they are found useless.

One of Ignatius Loyola's maxims was, "He who does well one work at a time, does more than all." By spreading our efforts over too large a surface we weaken our force, hinder our progress, and form a habit of fitfulness and ineffective working. Whatever a youth undertakes to learn, he should not leave it until he can reach his arms round it and clench his hands on the other side. Thus he will learn the habit of thoroughness. Lord St. Leonards once explained to Sir Fowell Buxton the way in which he had conducted his studies. "I resolved," said he, "when beginning to read

law, to make everything I a quired perfectly my own, and never to go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day as I read in a week; but, at the end of twelve months, my knowledge was as fresh as the day it was acquired, while theirs had glided away from recollection." Sir E. B. Lytton on e explaining how it was that, whilst so fully engaged in active life, he had written so many books, said, "I contrive to do so much by never doing too much at a time. As a general rule, I have devoted to study not more than three hours a day; and, when Parliament is sitting, not always that. But then, during those hours, I have given my whole attention to what I was about."

It is not the quantity of study that one gets through, or the amount of reading, that makes a wise man; but the , suitableness of the study to the purpose for which it is pursued; the concentration of the mind for the time being, upon the subject under consideration; and the habit of mental dis ipline. Abernethy was even of opinion that there was a point of saturation in his own mind, and that if he took into it something more than it could hold, it only had the effect of pushing something else out. Speaking of the study of medicine, he said, "If a man has a clear idea of what he desires to do, he will seldom fail in sele ting the proper means of accomplishing it." The most profitable study is that which is conducted with a definite and specific object-all observation, reflection, and reading being directed upon it for the time being. By thoroughly mastering any given branch of knowledge, we render it much more available for use at any moment. Hence it is not enough merely to have books, or to know where to read up for information as we want it. Practical wisdom, for the purposes of life, must be carried about with us, and be ready for use at call. It is not sufficient that we have a fund laid up at home, but not a farthing in the pocket: we must carry about with us a store of the

current coin of knowledge ready for exchange on all occasions, else we are comparatively helpless when the opportunity for action occurs.

An often quoted expression is that "Knowledge is power": but so also are fanaticism, despotism, and ambition. Knowledge of itself, unless wisely directed, might merely make bad men more dangerous. Knowledge must be allied to goodness and wisdom, and embodied in upright character, else it is naught. Pestalozzi even held intellectual training by itself to be pernicious; insisting that the roots of all knowledge must strike and feed in the soil of the religious rightlygoverned will. The acquisition of knowledge may, it is true, protect a man against the meaner felonies of life; but not in any degree against its selfish vices, unless fortified by sound principles and habits. Hence do we find in daily life so many instances of men who are well-informed in intellect, but utterly deformed in character; filled with the learning of the schools, yet possessing little practical wisdom, and offering examples rather for warning than imitation.

It is possible that at this day we may even exaggerate the importance of literary culture. We are apt to imagine that because we possess many libraries, institutes, and museums, we are making great progress. But such facilities may as often be a hindrance as a help to individual self-culture of the highest kind. The possession of a library, or the free use of it, no more constitutes learning, than the possession of wealth constitutes generosity. Though we undoubtedly possess great facilities, it is nevertheless true, as of old, that wisdom and understanding can only become the possession of individual men by travelling the old road of observation, attention, perseverance, and industry. The possession of the mere materials of knowledge is something very different from wisdom and understanding, which are reached through a higher kind of discipline than that of reading.

The multitude of books which modern readers wade through, may produce distraction as much as culture. Reading is often but a mere passive reception of other men's thoughts; there being little or no active effort of the mind in the transaction. Then how much of our reading is but a sort of indulgence, an intellectual dram-drinking, creating a grateful excitement for the moment, without the slightest effect in improving and enriching the mind or building up the character. Thus many think that they are cultivating their minds, when they are only killing time; of which perhaps the best that can be said is, that it merely keeps them from doing worse things.

It is also to be borne in mind that the experience gathered from books, though often valuable, is but of the nature of learning; whereas the experience gained from actual life is of the nature of wisdom; and a small store of the latter is worth vastly more than any stock of the former. Lord Bolingbroke truly said that "Whatever study tends neither directly nor indirectly to make us better men and citizens, is at best but a specious and ingenious sort of idleness, and the knowledge we acquire by it, only a creditable kind of ignorance—nothing more."

Useful though good reading may be, it is yet only one mode of cultivating the mind; and is much less influential than practical experience and good example in the formation of character. There were wise, valiant, and true-hearted men bred in England, long before the existence of a reading public. Magna Charta was secured by men who signed the deed with their marks. Thus the foundations of English liberty were laid by men, who, though illiterate, were nevertheless of the very highest stamp of character. And it must be admitted that the chief object of culture is, not merely to fill the mind with other men's thoughts but to enlarge our intelligence, and render us more efficient workers in the sphere of life to which may be called.

It is not how much a man may know that is of so much importance, as the end and purpose for which he knows it. The object of knowledge should be, to mature wisdom and improve character, to render us better, happier and more useful: more benevolent, more energetic, and more efficient in the pursuit of every high purpose in life. We must ourselves be and do, and not rest satisfied merely with reading and meditating over what other men have been and done. Our best light must be made life, and our best thought The humblest and least literate must train his sense of duty, and accustom himself to an orderly and diligent life. Though talents are the gift of nature, the highest virtue may be acquired by men of the humblest abilities, through careful self-discipline. At least we ought to be able to say, as Richter did. "I have made as much out of myself as could be made of the stuff, and no man should require more."

Self-respect is the noblest garment with which a man may clothe himself-the most elevating feeling with which the mind can be inspired. One of Pythagoras's wisest maxims, in his Golden Verses, is that in which he enjoins the pupil to "reverence himself." Borne up by this high idea, he will not defile his body by sensuality, nor his mind by servile thoughts. Self-respect, carried into daily life, will be found at the root of all the virtues-cleanliness, sobriety, chastity, morality, and religion. To think meanly of oneself, is to sink in one's own estimation as well as in the estimation of others. And as the thoughts are, so will the acts be. A man cannot live a high life who grovels in a moral sewer of his own thoughts. He cannot aspire if he look down; if he will rise, he must look up. The very humblest may be sustained by the proper indulgence of this feeling; and poverty itself may be lifted and lighted up by self-respect. It is truly a noble sight to see a poor man hold himself upright amidst all his temptations, and refuse to demean himself by low actions.

It is not necessary that we should insist on the uses of knowledge as a means of "getting on" in life. This is already sufficiently taught by obvious self-interest; and it is beginning to be pretty generally understood, that self-culture is one of the best possible investments of time and labour. In any line of life, intelligence will enable a man to adapt himself more readily to circumstances, suggest to him improved methods of work, and render him more apt, skilled, and effective in all respects. He who works with his head as well as his hands, will come to look at his business with a clearer eye; and he will become conscious of increasing power. The power of self-help will gradually grow; and in proportion to a man's self-respect, will he be armed against the temptation of low indulgences. Society and its action will be regarded with quite a new interest, his sympathies will widen and enlarge, and he will be attracted to work for others as well as for himself.

Self-culture may not, however, end in eminence, such as we have briefly described in the numerous instances of selfraised individuals above cited. The great majority of men, in all times, however enlightened, must necessarily be engaged in the ordinary callings of industry: and no degree of culture which can be conferred upon the community will ever enable them to get rid of the daily work of society, which must be done. But this, we think, may also be accomplished. can elevate the condition of labour by allying it to noble thoughts, which confer a grace upon the lowliest as well as the highest rank. For no matter how poor or humble a man may be, the great thinker of this and other days may come in and sit down with him, and be his companion for the time, though his dwelling be the meanest hut. It is thus that the habit of well-directed reading may become a source of the greatest pleasure and self-improvement. And even though self-culture may not bring wealth, it will at all events give us the good company of elevated thoughts. A nobleman once contemptuously asked of a sage, "What have you got by all your philosophy?" "At least I have got society in myself," was the wise man's reply.

CHAPTER X

DIFFICULTIES

"Is there one whom difficulties dishearten - who bends to the storm? He will do little. Is there one who will conquer? That kind of man never fails." - John Hunter.

It is not ease, but effort—not facility, but difficulty, that makes men. There is, perhaps, no station in life, in which difficulties have not to be overcome before any decided measure of success can be achieved. Those difficulties are, however, our best instructors, as our mistakes often form our best experience. Charles James Fox used to say that he hoped more from a man who failed, and yet went on in spite of his failure, than from the career of the successful. "It is all very well" said he, "to tell me that a young man has distinguished himself by a brilliant first speech. He may go on, or he may be satisfied with his first triumph; but show me a young man who has not succeeded at first, and nevertheless has gone on, and I will back that young man to do better than most of those who have succeeded at the first trial."

We learn wisdom from failure much more than from success. We often dis over what will do, by finding out what will not do; and probably he who never made a mistake, never made a discovery. Horne Tooke used to say of his studies in intellectual philosophy, that he had be ome all the better acquainted with the country through having had the good luck sometimes to lose his way. And a distinguished investigator in physical science has left it on record that, whenever in the course of his researches he encountered a very serious obstacle, he generally found himself on the brink of some discovery. The very greatest things—great thoughts,

discoveries, inventions—have generally been nurtured in hardship, often pondered over in sorrow, and at length established with difficulty.

It has been said, and truly, that it is the defeat that tries the general more than the victory. Washington lost far more battles than he gained: but he succeeded in the end. The Romans, in their most victorious campaigns, almost always began with defeats. Moreau used to be compared by his companions to a drum, which nobody hears of except it be beaten. Wellington's military genius was perfected by encounter with overwheling difficulties, which only served to nerve his resolution, and bring out his great qualities as a man and a general. So the skilful mariner obtains his best experience amidst storms and tempests, which train him to self-reliance, courage, and the highest discipline; and we probably owe to rough seas and wintry nights the best training of our race of British seamen, who are certainly not surpassed by any in the world.

Necessity may be a hard schoolmistress; but she is generally found the best. Though the ordeal of adversity is one from which which we naturally shrink, yet, when it comes, we must bravely and manfully encounter it. Burns truly says,

"Though losses and crosses
Be lessons right severe,
There's wit there, you'll get there,
You'll find no other where."

"Sweet indeed are the uses of adversity." They reveal to us our powers, and call forth our energies. If there be real worth in the character, like sweet herbs it will give forth its finest fragrance when pressed. "Crosses." says the old proverb, "are the ladders that lead to heaven." In the experience of life it is found that the wholesome discipline of adversity in strong natures usually carries with it a self-preserving influence. Many are found capable of bravely bearing up under privations, who are afterwards found unable

to withstand the more dangerous influences of prosperity. It is only a weak man whom the wind deprives of his cloak: a man of average strength is more in danger of losing it when assailed by the beams of a too genial sun. Thus it often needs a higher discipline and a stronger character to bear up under good fortune than under adverse.

The battle of life must generally be fought up-hill; and to win it without a struggle would be perhaps to win it without honour. If there were no difficulties there would be no success; if there were nothing to struggle for, there would be nothing to be achieved. Difficulties may frighten the weak, but they act only as a stimulus to men of pluck and resolution.

Wherever there is difficulty, the man who has to meet it must come out for better or for worse. Encounter with it will train his strength, and discipline his skill. The road to success may be steep to climb, but it puts to the proof the energies of him who would reach the summit. By experience a man soon learns how obstacles are to be overcome by grappling with them. Thus difficulties often fall away of themselves before the determination to overcome them. In nine cases out of ten, if marched boldly up to they will flee away. Like thieves, they often disappear at a glance. What looked like insuperable obstacles, like some great mountain chain in our way, are found to become practicable when approached, and paths formerly unseen, though they may be narrow and difficult, open a way for us through the hills.

Much will be done if we do but try. Nobody knows what he can do till he has tried; and few try their best till they have been forced to do it. "If I could do such and such a thing," sighs the desponding youth. But he will never do, if he only wishes. The desire must ripen into purpose and effort; and one energetic attempt is worth a thousand aspirations. Purposes, like eggs, unless they be hatched into action, will run into rottenness. It is these thorny "ifs"—the

mutterings of weakness and despair—which so often prevent being done or even attempted. "A difficulty," said Lord Lyndhurst, "is a thing to be overcome". Grapple with it at once; facility will come with practice, and strength and fortitude with repeated effort. Thus the mind and character may be trained to an almost perfect discipline, enabling it to move with grace, spirit, and liberty.

Nothing is easy, but was difficult at first-not even so simple an act as walking. The dancer who turns a pirouette, the violinist who plays a sonata, have acquired their dexterity by patient repetition and after many failures. Carissimi, when praised for the ease and grace of his melodies, exclaimed, "Ah! you little know with what difficulty this ease has been acquired." Sir Joshua Revnolds, when once asked how long it had taken him to paint a certain picture, replied, "All my The orator, who pours his flashing thoughts with such apparent ease upon the minds of his hearers, achieves his wonderful power only by means of patient and persevering labour, after much repetition, and, like Disraeli, often after bitter disappointments. Henry Clay, the American orator, when giving advice to young men, said: "I owe my success in life," said he, "chiefly to one circumstance—that at the age of twentyseven I commenced, and continued for years, the process of daily reading and speaking upon the contents of some historical or scientic book. These off-hand efforts were made, sometimes in a corn-field, at others in the forest, and not unfrequently in some distant barn, with the horse and the ox for my auditors. It is to this early practice of the art of all arts that I am indebted for the primary and leading impulses that stimulated me onward, and have shaped and moulded my whole subsequent destiny."

Curran, the Irish orator, when a youth, had a strong defect in his speech, and at school he was known as "stuttering Jack Curran." While he was studying the law, and still struggling to overcome his defect, he was stung into eloquence by the

sarcasms of a member of a debating club, who called him "Orator Mum"; for when he had stood up to speak on a previous occasion Curran had not been able to utter a word. But the taunt raised his pluck; and he replied with a triumphant speech. This accidental discovery in himself of the gift of eloquence encouraged him to proceed in his studies with additional energy. He corrected his enunciation by reading aloud, emphatically and distinctly, the best passages in our literature, for several hours every day, studying his features before a mirror, and adopting gestures suited to his rather awkward figure. He also proposed cases to himself, which he detailed with as much care as if he had been addressing a jury. Curran commenced business with the qualification which Lord Eldon stated to be the first requisite for distinction as a barrister, that is, "to be not worth a shilling." We need not say how Curran's perseverance, energy, and genius, eventually succeeded.

The most highly educated men are those who have been the most resolute in their encounter with difficulties. The extremest poverty has been no obstacle in the way of men devoted to the duty of self-culture. Professor Alexander Murray, the linguist, learnt to write by scribbling his letters on an old wool-card with the end of a burnt heather stem. The only book which his father, who was a poor shepherd, possessed was a penny Shorter Catechism; but that, being thought to valuable for common use, was carefully kept in a cupboard for the Sunday catechisings. Professor Moor, when a young man. being too poor to purchase Newton's Principia, borrowed the book, and copied the whole of it with his own hand. Many poor students, while labouring daily for their living, have only been able to snatch an atom of knowledge here and there at intervals, as birds do their food in winter time when the fields are covered with snow. They have struggled on, and faith and nope have come to them. A well-known author and publisher, William Chambers, of Edinburgh, speaking before

an assemblage of young men in that city, thus briefly described to them his humble beginnings, for their encouragement: "I stand before you." he said, "a self-educated man. My education was that which is supplied at the humble parish schools of Scotland; and it was only when I went to Edinburgh, a poor boy, that I devoted my evenings, after the labours of the day, to the cultivation of that intellect which the Almighty has given me. From seven or eight in the morning till nine or ten at night, was I at my business as a bookseller's apprentice, and it was only during hours after these, stolen from sleep, that I could devote myself to study."

William Cobbett has himself told the interesting story of how he learnt English Grammar, and, as a curious illustration of that brave man's pluck in grappling with a difficulty, we cannot do better than quote it here. "I learned grammar," he said, "when I was a private soldier on the pay of six-pence a day. The edge of my berth, or that of my guard-bed, was my seat to study in; my knapsack was my book-case; a bit of board lying on my lap was my writing-table; and the task did not demand anything like a year of my life. I had no money to purchase candle or oil; in winter time it was rarely that I could get any evening light but that of the fire, and only my turn even of that. And if I, under such circumstances, and without parent or friend to advise of encourage me, accomplished this undertaking, what excuse can there be for any youth, however poor, however pressed with business, or however circumstanced as to room or other conveniences? buy a pen or a sheet of paper I was compelled to forego some portion of food, though in a state of half-starvation: I had no moment of time that I could call my own; and I had to read and to write amidst the talking, laughing, singing, whistling, and brawling of at least half a score of the most thoughtless of men, and that, too, in the hours of their freedom from all control. Think not lightly of the farthing that I had to give, now and then, for ink, pen, or paper! That farthing

was, alas! a great sum to me! I was as tall as I am now; I had great health and great exercise. The whole of the money, not expended for us at market, was two-pence a week for each man. I remember, and well I may! that on one occasion I, after all necessary expenses, had, on a Friday, made shifts to have a halfpenny in reserve, which I had destined for the purchase of a red-herring in the morning; but, when I pulled off my clothes at night, so hungry then as to be hardly able to endure life, I found that I had lost my halfpenny! I buried my head under the miserable sheet and rug, and cried like a child! And again I say; if I, under circumstances like these, could encounter and overcome this task, is there, can there be, in the whole world, a youth to find an excuse for the non-performance?"

Sir Walter Scott used to refer to the case of his young friend John Leyden as one of the most remarkable illustrations of the power of perseverance which he had ever known. The son of a shepherd in one of the wildest valleys of Roxburghshire, he was almost entirely self-educated. Like many Scotch shepherds' sons-like Hogg, who taught himself to write by copying the letters of a printed book as he lay watching his flock on the hillside-like Cairns, who from tending sheep on the Lammermoors, raised himself by dint of application and industry to the professor's chair—like Murray, Ferguson, 'and many more, Leyden was early inspired by a thirst for knowledge. When a poor barefooted boy, he walked six or eight miles across the moors daily to learn reading at the little village schoolhouse of Kirkton. And this was all the education he received; the rest he acquired for himself. He found his way to Edinburgh to attend the college there, in spite of the greatest poverty. He was first discovered as a frequenter of a small bookseller's shop kept by Archibald Constable, afterwards so well-known as a publisher. He would pass hour after hour perched on a ladder in mid-air, with some book in his hand, forgetful oft he scanty meal of bread and water

which awaited him at his miserable lodging. All he wanted was books and lectures. Thus he toiled and battled at the gates of knowledge until his unconquerable perseverance carried everything before it. Before he had reached his nineteenth year he had astonished all the professors in Edinburgh by his knowledge of Greek and Latin, and the general mass of information he had acquired. Having turned his mind to India, he sought employment in the civil service, but failed. He was however informed that a surgeon's assistant's commission was open But he was no surgeon, and knew no more of the profession than a child. He could however learn Then he was told that he must be ready to pass in six months! Nothing daunted, he set to work, to acquire in six months what usually requires three years. At the end of six months he took his degree with honour. Scott and a few friends helped to fit him out; and he sailed for India, after publishing his beautiful poem "The Scenes of Infancy." In India he promised to become one of the greatest of oriental scholars, but unhappily - he was cut off by fever caught by exposure, and died at an early age.

There are many more illustrious names which might be mentioned to prove the truth of the common saying that "it is never too late to learn." Even at an advanced age men can do much, if they will determine on making a beginning. Sir Henry Spelman did not begin the study of science until he was between fifty and sixty years of age. Franklin was fifty before he fully entered upon the study of Natural Philosophy. Dryden and Scott were not known as authors until each was in his fortieth year. Boccaccio was thirty-five when he entered upon his literary career, and Alfieri was forty-six when he commenced the study of Greek. Dr. Arnold learnt German at an advanced age, for the purpose of reading Niebuhr in the original; and in like manner James Watt, when about forty, while working at his trade of an instrument-maker in Glasgow, learnt French, German, and

Italian, to enable himself to study the valuable works on mechanical philosophy in these languages. Robert Hall was once found lying upon the floor, racked by pain, learning Italian in his old age, to enable him to judge of the parallel drawn by Macaulay between Milton and Dante. Handel was forty-eight before he published any of his great works. Indeed hundreds of instances might be given of men who struck out an entirely new path, and successfully entered on new studies, at a comparatively advanced time of life. None but the frivolous or the indolent will say, "I am too old'to learn."

And here we must repeat what we have said before, that it is not men of genius who move the world, and take the lead in it, but men of steadfastness, purpose, and tireless industry. Notwithstanding the many curious stories which have been told about the infancy of men of genius, it is nevertheless true that early cleverness is no test whatever of the height to which the grown man will reach. Precocity is quite as often a symptom of disease as an indication of intellectual vigour in youth. What becomes of all the "remarkably clever children?" Where all are the prize boys? Trace them through life, and it will often be found that the dull boys, who were generally beaten at school, have shot ahead of them. The clever boys are rewarded, but the prizes which they gain by their greater quickness and facility rarely prove of service to them. What ought rather to be rewarded is. the endeavour, the struggle, and the obedience; for it is the vouth who does his best though not so clever as others, that ought above all others to be encouraged.

An interesting chapter might be written on the subject of illustrious dunces—dull boys, but brilliant men. Newton, when at school, stood at the bottom of the lowermost class but one. The boy above Newton having kicked him, the dunce showed his pluck by challenging him to a fight, and beat him. Then he set to work with a will, and determined

also to vanquish his antagonist as a scholar, which he did, rising to the top of his class. Many of our greatest divines have been anything but clever when boys. Isaac Barrow, when a boy at the Charter-house school, was notorious chiefly for his strong temper, pugnacious habits, and proverbial idleness as a scholar; and he caused such grief to his parents, that his father used to say that, if it pleased God to take from him any of his children, he hoped it might be Isaac, the least promising of them all. Adam Clarke, when a boy, was proclaimed by his father to be "a grievous dunce." Dean Swift, one of the greatest writers of pure English, was "plucked" at Dublin University, and only obtained his recommendation to Oxford as a special favour.' The wellknown Dr. Chalmers and Dr. Cook were boys together at the parish school of St. Andrew's; and they were found so stupid and mischievous, that the master, irritated beyond measure. dismissed them both as hopeless dunces.

What Dr. Arnold said of boys is equally true of menthat the difference between one boy and another consists not so much in talent as in energy. Given perseverance, and energy soon becomes habitual. If the dunce has persistency and application, he will beat the eleverer fellow without these qualities. Slow but sure, wins the race. It is perseverance that explains how the position of boys at school is so often reversed in real life; and it is curious to note how some who were then so elever have since become so commonplace; whilst others, dull boys, of whom nothing was expected slow in their faculties but sure in their pace, have become leaders of men.

CHAPTER XI

CHARACTER—THE TRUE GENTLEMAN

"And thus he bore without abuse The grand old name of Gentleman."—Tennyson.

The crown and glory of life is character. It is the noblest possession of a man, dignifying every station, and exalting every position in society. It exercises a greater power than wealth, and secures all the honour without the jealousies of fame. It carries with it an influence which always tells; for it is the result of proved honour, rectitude, and consistency—qualities which, perhaps more than any other, command the general confidence and respect of mankind.

Character is human nature in its best form. It is moral order embodied in the individual. Men of character are not only the conscience of society, but in every well-governed state they are its best motive power; for it is moral qualities in the main which rule the world. Even in war, Napoleon said the moral is to the physical as ten to one. The strength, the industry, and the civilization of nations—all depend upon individual character; and the very foundations of civil security rest upon it. Laws and institutions are but its outgrowth. In the just balance of nature, individuals, and nations, and races, will obtain just so much as they deserve, and no more.

Though a man have comparatively little culture, slender abilities, and but small wealth, yet, if his character be of sterling worth, he will always command an influence, whether it be in the workshop, the counting house, the market, or the senate. Canning wisely wrote in 1801, "My road must be through character to power; I will try no other course; and I am sanguine enough to believe that this course, though not

perhaps the quickest, is the surest." You may admire men of intellect; but something more is necessary before you will trust them. Hence Lord John Russell once observed, in a sentence full of truth. "It is the nature of political party in England to ask the assistance of men of genius, but to follow the guidance of men of character." This was strikingly illustrated in the career of the late Francis Horner—a man of whom Sydney Smith said that the Ten Commandments were stamped upon his countenance. "The valuable and peculiar light," says Lord Coekburn, "in which his history is calculated to inspire every rightminded vouth, is this. He died at the age of thirty-eight; possessed of greater public influence than any other private man; and admired, beloved, trusted, deplored by all, except the heartless or the base. No greater homage was ever paid in Parliament to any deceased member. Now let every young man ask—how was this attained? rank? He was the son of an Edinburgh merchant. wealth? Neither he, nor any of his relations, ever had a sixpence to spare. By office? He held but one, and only for a few years, of no influence, and with very little pay. By talents? His were not splendid, and he had no genius. Cautious and slow, his only ambition was to be right. By eloquence? He spoke in calm, good taste, without any of the oratory that either terrifies or charms. By any fascination of manner? His was only correct and agreeable. what then was it? Merely by sense, industry, good principles, and a good heart-qualities which no well-constituted mind need ever despair of attaining. It was the force of his character that raised him. There were many in the House of Commons of far greater ability and eloquence. But no one surpassed him in the combination of an adequate portion of these with moral worth. Horner was born to show what moderate powers, unaided by anything whatever except culture and goodness, may achieve, even when these powers are displayed amidst the competition and jealousy of public life."

That character is power, is true in a much higher sense than that knowledge is power. Mind without heart, intelligence without conduct, eleverness without goodness, are powers in their way, but they may be powers only for mischief. We may be instructed or amused by them; but it is sometimes as difficult to admire them as it would be to admire the dexterity of a pickpocket.

Truthfulness, integrity, and goodness—qualities that hang not on any man's breath—form the essence of manly character. He who possesses these qualities, united with strength of purpose, carries with him a power which is irresistible. He is strong to do good, strong to resist evil, and strong to bear up under difficulty and misfortune. When Stephen of Colonna fell into the hands of his base assailants, and they asked him in derision, "Where is now your fortress?" "Here," was his bold reply, placing his hand upon his heart. It is in misfortune that the character of the upright man shines forth with the greatest lustre; and when all else fails, he takes stand upon his integrity and his courage.

Every man is bound to aim at the possession of a good character, as one of the highest objects of life. The very effort to secure it by worthy means will furnish him with a motive for exertion; and his idea of manhood, in proportion as it is elevated, will steady and animate his motive. It is well to have high standard of life, even though we may not be able altogether to realize it. "The youth," says Mr. Disraeli, "who does not look up will look down; and the spirit that does not soar is destined perhaps to grovel."

Truthfulness in word and deed is the backbone of character. A man must really be what he seems or purposes to be. When an American gentleman wrote to Granville Sharp, that from respect for his great virtues he had named one of his sons after him, Sharp replied: "I must request you to teach him a favourite maxim of the family whose name you have given him—Always endeavour to be really what you would

wish to appear. Every man who respects himself, and values the respect of others, will carry out the maxim in act—doing honestly what he proposes to do—putting the highest character into his work, scamping nothing, but priding himself upon his integrity and conscientiousness. Once Cromwell said to Bernard—a clever but somewhat unscrupulous lawyer—"I understand that you have lately been vastly wary in your conduct; do not be too confident of this; subtlety may deceive you, integrity never will." Men whose acts are at direct variance with their words, command no respect, and what they say has but little weight; even truths, when uttered by them, seem to come blasted from their lips.

The development of character largely depends upon the cultivation of good habits. Man, it is said, is a bundle of habits, and habit is se ond nature. How necessary it is, then, to see that the habits we form are good and not bad.

Wherever formed, habit acts involuntarily, and without effort; and, it is only when you oppose it, that you find how powerful it has become. What is done once and again, soon becames easy. The habit at first may seem to have no more strength than a spider's web; but once formed, it binds as with a chain of iron. The small events of life, taken singly may seen unimportant like snow that falls silently, flake, by flake; yet accumulated, these snow-flakes from the avalanche.

Self-respect, self-help, application, industry, integrity all are of the nature of habits, not beliefs. Principles, in fact, are but the names which we assign to habits; for the principles are words, but the habits are the things themselves; benefactors or tyrants, according as they are good or evil. It thus happens that, as we grow older, a portion of our free activity and individuality becomes suspended in habit, our actions become of the nature of fate; and we are bound by the chains which we have woven around ourselves.

It is indeed scarcely possible to over-estimate the importance of training the young to virtuous habits. In them they are the easiest formed, and when formed they last for life; like letters cut on the bark of a tree, they grow and widen with age. "Train up a child in the way he should go, and when he is old he will not depart from it." The beginning holds within it the end; the first start on the road of life determines the direction and the destination of the journey; " it is the first step which counts." "Remember," said Lord Collingwood to a young man whom he loved, "before you are five-and-twenty you must establish a character that will serve you all your life." As habit strengthens with age, and character becomes formed, any turning into a new path becomes more and more difficult. Hence, it is often harder to unlearn than to learn; and for this reason the Grecian flute-player was justified who charged double fees to those pupils who had been taught by an inferior master. To uproot an old habit is sometimes a more painful thing, and vastly more difficult, than to wrench out a tooth. Try to reform a habitually indolent, or improvident, or drunken person, and in a large majority of cases you will fail. For the habit in each case has wound itself in and through the life until it has become an integral part of it, and cannot be uprooted. Hence, as Mr. Lynch observes, "the wisest habit of all is the habit of care in the formation of good habits."

One of the most marked tests of character, is the manner in which we conduct ourselves towards others. A graceful behaviour towards superiors, inferiors, and equals, is a constant source of plasure. It pleases others because it indicates respect for their personality; but it gives tenfold more pleasure to ourselves. Every man may to a large extent be a self-educator in good behaviour, as in everything else; he can be civil and kind, if he will, though he have not a penny in his purse. Gentleness in society is like the silent influence of light, which gives colour to all nature; it is far more powerful than

loudness or force, and far more fruitful. Good manners, as we call them, are neither more nor less than good behaviour, consisting of courtesy and kindness; for benevolence is the chief element in all kinds of mutually beneficial and pleasant intercourse amongst human beings. "Civility," Lady Montague, "costs nothing and buys everything." The cheapest of all things is kindness. Those little courtesies which form the small change of life, may separately appear of little value, but they become important by repetition and arcumulation. They are like the spare minutes, or the penny a day, which proverbially produce such momentous results in the course of a twelvemonth, or in a lifetime.

Another way of showing true politeness is, consideration for the opinions of others. It has been said of dogmatism, that it is only "puppyism" come to its full growth; and certainly the worst form this quality can assume, is that of opinionativeness and arrogance. Let men agree to differ, and, when they do differ, bear and forbear. Principles and opinions may be maintained with perfect politeness, without coming to blows or uttering hard words; and there are circumstances in which words are blows, and inflict wounds far less easy to heal. As bearing upon this point, we quote a little parable spoken some time since by a preacher :-- "As I was going to the hills," he said, "early one misty morning, I saw something moving on a mountain side, so strange-looking that I took it for a monster. When I came nearer to it. I found it was a man. When I came up to him, I found he was my brother."

The inbred politeness which springs from right-heartedness and kindly feelings, belongs to no particular rank or station. The mechanic who works at the bench may possess it, as well as the clergyman or the peer. It is by no means a necessary condition of labour, that it should be either rough or coarse. From the highest to the lowest, the richest to the poorest, to no rank or condition in life has nature denied her

highest boon—the great heart. There never yet existed a gentleman but was lord of a great heart. And this may exhibit itself under the rough dress of the peasant as well as under the laced coat of the noble. Robert Burns was once taken to task by a young Edinburgh man of fashion with whom he was walking, for recognizing an honest farmer in the open street. "Why," exclaimed Burns, "it is not the great coat, the rough cap and the common dress that I spoke to, but the man that was in them; and the man, sir, for true worth, would weigh down you and me, and ten more such, any day."

Riches and rank have no necessary connection with genuine gentlemanly qualities. The poor man may be a true gentleman—in spirit and in daily life. He may be honest, truthful, upright, polite, temperate, courageous, self-respecting, and self-helping—that is, be a true gentleman. Here is a fine example of fine courtesy set by two English working men, in Paris.

"One day a hearse was ascending the steep Rue de Clichy on its way to Montmartre, bearing a coffin of poplar wood with its cold corpse. Not a soul followed—not even the living dog of the dead man, if he had one. The day was rainy and dismal; passers-by lifted the hat as is usual when a funeral passes, and that was all. At length it passed two English navvies, who found themselves in Paris on their way from Spain. A right feeling spoke from beneath their serge jackets. 'Poor wretch!' said the one to the other, 'no one follows him; let us two follow!' And the two took off their hats, and walked bare-headed after the corpse of a stranger to the cemetery of Montmartre."

The true gentlem in has a keen sense of honour,—scrupulously avoiding mean actions. His standard of probity in word and action is high. He does not shuffle nor prevaricate, dodge nor skulk; but is honest, upright, and straightforward. His law is rectitude—action in right lines. When he says

ves, it is a law: and he dares to say the valiant no at the fitting season. The gentleman will not be bribed; only the low-minded and unprincipled will sell themselves to those who are interested in buying them. Shortly after the battle of Assave, the prime minister of the Court of Hyderabad waited upon Sir Arthur Wellesley for the purpose of privately finding what territory and what advantages had been reserved for his master in the treaty of peace between the Mahratta princes and the Nizam. To obtain this information the minister offered the general a very large sum-considerably above £100,000. Looking at him quietly for a few seconds, Sir Arthur said, "It appears, then, that you are capable of keeping a secret?" "Yes, certainly," replied the minister. "Then so am I," said the English general, smiling, and bowed the minister out. It was to Wellington's great honour, that though uniformly successful in India, and with the power of earning in such ways as this enormous wealth, he did not add a farthing to his fortune, and returned to England a comparatively poor man.

The True Gentleman is one whose nature has been fashioned after the highest models. It is a grand old name, that of Gentleman, and has been recognized as a rank and power in all stages of society. "The Gentleman is always the Gentleman," said the old French general to his regiment of Scottish gentry at Rousillon, "and always proves himself such in need and in danger." To possess this character is a dignity of itself, commanding the instinctive homage of every generous mind, and those who will not bow to titular rank, will yet do homage to the Gentleman. His qualities depend not upon fashion or manners, but upon moral worth—not on personal possessions, but on personal qualities. The Psalmist briefly describes him as one "that walketh uprightly, and worketh righteousness, and speaketh the truth in his heart."

. There are many tests by which a gentleman may be known; but there is one that never fails—How does he

exercise power over those subordinate to him? How does he conduct himself towards women and children? How does the officer treat his men, the employer his servants, the master his pupils, and the man in every station those who are weaker than himself? The discretion, forbearance, and kindliness, with which power in such cases is used, may indeed be regarded as the crucial test of gentlemanly character. He who bullies those who are not in a position to resist. may be a snob, but cannot be a gentleman. He who tyrannizes over the weak and helpless, may be a coward, but no true man. The tyrant, it has been said, is himself but a slave turned inside out. Strength, and the cousciousness of strength, in a right-hearted man, imparts a nobleness to his character; but he will be most careful how he uses it : for

"It is excellent
To have a giant's strength; but it is tyrannous
To use it like a giant."

Gentleness is indeed the best test of gentlemanliness. A consideration for the feelings of others, for his inferiors and dependants as well as his equals, and respect for their self-respect, will pervade the true gentleman's whole conduct.

Notwithstanding the wail which we occasionally hear for the chivalry that is gone, our own age has witnessed deeds of bravery and gentleness - of heroic self-denial and manly tenderness—which are unsurpassed in history. The wreck of the Birkenhead off the coast of Africa or February 27, 1852, gives a memorable illustration of the chivalrous spirit of common men acting in this nineteenth century, of which any age might be proud. The vessel was steaming along the African coast with 472 men and 166 women and children on board. The men belonged to several regiments then serving at the Cape, and consisted principally of recruits, who had been only a short time in the service. At two o'clock in the morning, while all were asleep below, the ship struck with violence upon a hidden rock; and it was at once felt that she

must go down. The roll of the drums called the soldiers to arms on the upper deck, and the men mustered as if on parade. The word was passed to save the women and children; and the helpless creatures were brought from below, mostly undressed, and handed silently into the boats. When they had all left the ship's side, the commander of the vessel thoughtlessly called out, "All those that can swim. jump overboard and make for the boars." But Captain Wright, of the 91st Highlanders, said, "No! if you do that. the boats with the women must be swamped:" and the brave men stood motionless. There was no boat remaining, and no hope of safety; but not a heart quailed; no one flinched trom his duty in that trying moment. "There was not a murmur nor a ery amongst them," said Captain Wright, a survivor, "until the vessel made her final plunge." Down went the ship, and down went the heroic band, firing a feu de joie as they sank beneath the waves. Glory and honour to the gentle and the brave! The examples of such men never die, but, like their memories, are immortal.

The quaint old Fuller sums up in a few words the character of the true gentleman and man of action in describing that of the great admiral, Sir Francis Drake: "Chaste in his life, just in his dealings, true to his word: merciful to those that were under him, and hating nothing so much as idleness; in matters especially of moment, he was never wont to rely on other men's care, how trusty or skilful soever they might seem to be, but always contemning danger, and refusing no toyl; he was won't himself to be one (whoever was a second) at every turn, where courage, skill, or industry, was to be employed."

CHAPTER I

- Page 3. "A soldiers' battle"—The battle of Inkerman (Nov. 5, 1854), in the Crimean War, was so called because the victory of the English and French armies over the Russians was due more to the courage and tenacity of the soldiers than to the skill of the generals.
 - 4. Sir Richard Arkwright—See a sketch of his life in Chap. II. He was born in 1732, and died in 1792. He is famous as the inventor of the Spinning Machine—the Spinning Jenny, or water-frame. He was knighted in 1786.
 - Lord Tenterden Charles Abbot, Baron Tenterden (1762-1832). He became Lord Chief Justice in 1818, and was raised to the peerage in 1827.
 - Turner Joseph Mallord William Turner (1775-1851), the great English landscape painter. Ruskin's famous book, Modern Painters, was written mainly to explain his work and prove his greatness as a painter. (See Chap. V).
 - Brindley James Brindley (1716-72), the great Engineer, who commenced English inland navigation by planning the canal between Manchester and Worsley for the Duke of Bridgewater.
 - Cook—James Cook (1728-1779), the great English Explorer. He made his first voyage in 1768-71, sailing round New Zealand for the first time, and proving that Australia was an island. In his next voyage (1773-5) he reached the Antartic Circle.

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- Page 4. and discovered islands in the Pacific. In his last voyage (1776-9) he explored the west coast of N. America. He returned to the Sandwich islands in order to survey them, and was killed in 1779 at Hawaii in a fight with the natives.
 - Burns Robert Burns (1759-96), the greatest of Scottish poets. Burns was the son of a poor farmer in Ayrshire, and started life as a ploughman.
 - Ben Jonson (1573-1637), the famous English poet and dramatist, contemporary and friend of Shakespeare, the author of Every Man in his Humour and many other plays.
 - Telford—Thomas Telford (1757-1834), Scottish Civil Engineer. His most famous works were the Ellesmere Canal between the Severn and the Mersey, the construction of the main roads in the Highlands of Scotland, the improvement of Scotch harbours, the making of the great Caledonian Canal in Scotland, and the building of the Menai Suspension Bridge between Wales and Anglesea.
 - Hugh Miller (1802-56), Scottish Geologist and man of letters. In his youth he was a stone-mason. His best-known books are The Old Red-Sandstone (1840), My Schools and Schoolmasters (1852), and The Testimony of the Rocks (1857). In his last days his reason failed, and he shot himself.
 - 5. Inigo Jones --(1573-1652), the English Architect, born in London. He studied in Italy, and introduced the Italian style of architecture into England. His chief work was the design for the banqueting. ball in Whitehall (London), in the reign of Charles I.
 - John Hunter -- John Hunter (1728-93), the Scottish anatomist and surgeon, who made several important. discoveries in physiology and practical surgery.

Page 5. Opie - John Opie : 1761-1807), the English painter.

Romney-George Romney (1734-1802), English portrait painter. He painted portraits of fashionable men and women of his day, and historical pictures.

- Lee who became Professor of Hebrew and Arabic at Cambridge. He started life as a working carpenter, and in his leisure-time taught himself Latin, Greek, Hebrew, and Syriac. Later he became a schoolmaster, and mastered Arabic, Persian and Urdu. Some friends helped him to go to Cambridge, where he distinguished himself and became professor.
- Gibson John Gibson (1790-1866), the Welsh sculptor, son of a market-gardener.
- Simpson Thomas Simpson (1710-61), the self-taught English Mathematician, who worked as a weaver in London in 1735. In 1743 he became Professor of Mathematics in the Royal Academy, Woolwich, and in 1745 a fellow of the Royal Society.
- Bacon—John Bacon (1740-99), English sculptor. The monument to the elder Pitt, Earl of Chatham, in Westminster Abbey, and his statues of Dr. Johnson and John Howard, in St. Paul's Cathedral are his best known works.
- Wilson-Alexander Wilson (1760-1813), the Scottish ornithologist (expert in ornithology, or the scientific study of birds). He emigrated to America in 1794, and earned his living there as a weaver, and a schoolmaster, while he was making a fine collection of rare American birds. In 1808-13 he published his American Ornithology.
- Dr. Livingstone—David Livingstone (1813-73), the Scottish Missionary and explorer. (See Chap. VI).

- Page 5. Sir Cloudesley Shovel—(1650-1707), the English Admiral. He took part in the battle of Bantry Bay, in 1689, and earned a knighthood; and he fought in the naval action of Cape Barfleur, in 1702, Vigo in 1702, and Mallago in 1704. As rearadmiral he captured Barcelona in 1705,
 - Sturgeon -William Sturgeon (1783-1850), the English Electrician. He constructed the first Electromagnet. He became lecturer in Science at the Royal Military College at Adiscombe and later Superintendent of the gallery of Practical Science at Manchester.
 - William Carey—the English Missionary (1761-1834). He arrived in Calcutta as a missionary in 1794, being sent out by the Baptist Missionary Society, and founded the Serampur Mission in 1799. He was a great student of Oriental languages, and was Professor in the College of Fort William until 1830.

Banff-a town in the north of Scotland.

- Cardinal Wolsey-Thomas Wolsey (1471-1530), the great Minister of King Henry VIII. He was Archbishop of York, Lord Chancellor of England, and Cardinal of Rome.
- De Foe-Daniel Defoe (1659-1731), the author of Robinson Crusoe, and other less famous novels, and of many political pamphlets.
- Kirke White Henry Kirke White (1785-1806), the English poet.
- Bunyan—John Bunyan (1628-88), the famous author of *The Pilgrim's Progress*, the greatest religious. allegory. He was imprisoned in Bedford jail for twelve years (1660-72) for preaching the Gospel, during the persecution of the non-conformists in the reign of Charles II. It was in prison he wrote, *Pilgrim's Progress*.

- ge 5. Newcomen Thomas Newcomen (1663-1729), the English inventor of the atmospheric steam-engine. He took out a patent, along with Savery and Cawley in 1705 for what was then called a "Fire-Engine," and set up an engine for drawing water in 1723.
 - Watt-James Watt (1731-1819), Scottish Engineer. He made such improvements on Newcomen's steamengine, that he is generally thought to be the inventor of the steam-engine. (See Chap. II).
 - Stephenson -George Stephenson (1781-1848), the inventor of the locomotive steam-engine. His first engine, the "Rocket," which could do 30 miles an hour, is still preserved in the Kensington Museum. London.
 - Baffin -William Baffin (1584-1622), the Explorer. He sailed in the Discovery in 1615 to search for the North-West passage by Davis Strait. He failed in this, but discovered the sea that was called after him Baffin Bay.
 - Herschel—Sir William Herschel (1738-1822), born in Hanover. He came to England in 1757, and earned his living as a teacher of music. He studied astronomy, and made a telescope for himself with which he discovered a new planet. This led to his appointment as Astronomer Royal to King George III. In 1789 he erected his famous telescope of forty feet frocal length.
 - Chantrey—Sir Francis Legatt Chantrey (1781-42), the English sculptor. He executed many famous statues of famous Englishmen—such as Pitt, Watt, Canning, Wellington, etc.
 - Etty-William Etty (1787-1849), English painter and pupil of Lawrence. He was especially noted for the beauty and brilliance of his colouring.

- Page 5. Sir Thomas Lawrence—(1769-1830), English portrait painter. He became President of the Royal Academy in 1820,
 - Faraday Michael Faraday (1791-1867), the English chemist, electrician and scientist. He became a pupil Sir Humphrey Davy, in 1813. In 1831 was published his famous discovery of magneto-electric induction. He was noted as a greated scientific discoverer, a popular science lecturer, and a great scientific writer.

CHAPTER II

- ,, 8. Newcomen see note on Chap. I. He, along with Savery and Cawley made the piston-engine a practical machine.
 - Potter, the engine-boy-see a reference to his invention (the automatic opening and shutting of the piston valve) in Adam Smith's Wealth of Nations, Chap. I.
 - Smeaton—John Smeaton (1724-92), English Civil Engineer.
- ,, 9. Boulton Matthew Boulton (1728-1809, English Engineer and inventor.
- " 10. Trevithick Richard Trevithick (1771-1833), mining engineer and inventor.
- ,, 12. Hargreaves -James Hargreaves (died 1778), handloom weaver, and inventor of the spinning-jenny in 1764. He was mobbed in 1768 by his fellowworkmen, who destroyed his machines.
- ,, 13. Strutt Jedediah Strutt, the inventor of a machine for making ribbed stockings. He became a successful and wealthy manufacturer, and his family afterward was ennobled.
- " 14. Wedgewood Josiah Wedgewood (1730-95). He left a fortune of nearly a million pounds at his death.

- Page 16. Queen Charlotte Sophia Charlotte of Meeklenburg
 Strelitz, wife of King of George III.
 - Hamilton—Sir William Hamilton (1730-1803), British ambassador at Naples. He made a valuable collection of vases, terra-cottas, bronzes, etc.
 - Herculaneum -a ruined city in Italy, near Naples, and at the foot of Mnt. Vesuvius. It was destroyed by an earthquake in 63 A. D., and was buried, along with Pompeii, by an eruption of the volcano in 79 A. D. Since 1737 it has been excavated, and much of the ancient Roman things found in it are in the museum at Naples.
 - Flaxman -- John Flaxman (1755-1826), English Sculptor-See a sketch of his life in Chap. V.
 - Etruscans the people who in ancient times occupied Central Italy (Etruria).
 - Pyrometer instrument for measuring temperatures. The Potteries the part of Staffordshire, England, where the chief industry is pottery-making.

CHAPTER III

- ,, 18. Palissy -Bernard Palissy (1510-89).
- ,, 19. Robbia -Luca della Robbia (1399-1482), sculptor of Florence, in Italy.
 - Majorca -- hence this kind of ware was called Majolica.
- ,, 23. Buffon George Louis Leclere, Comte de Buffon (1707-88), the great French naturalist.
- France in the 16th centuries were called.

 Huguenots. They were persecuted for their faith
 by the bigoted Roman Catholic party, which was
 led by the powerful family of Guise.
 - Montmorency Anne, Duc de Montmorency (1493-1567), the leader of a party opposed to the Guises.

Palissy had been arrested in 1562, and was released in 1564 in the reign of Charles IX.

Page 24. Catherine de Medici — (1519-89), wife of Henry II King of France. When Henry died in 1559, her son, Francis II, became king, and she became a political power as Queen Mother. Another son, Charles IX, became king in 1560, and another, Henry III, in 1574. During all these reigns she was the real ruler. She is held partly responsible for the massacre of St. Bartholemew in 1572.

CHAPTER IV

- " 26. Michael Angelo Michael Angelo Buonarrotti (1475-1584), the great Italian sculptor, painter, architect, military engineer, and poet.
 - Nicholas Poussin—the French classical landscape and figure painter (1593-1665). He did much of his work in Rome.
 - Dr. Young-Thomas Young (1773-1829), English
 Physicist and Egyptologist. He established the
 undulatory theory of light.
 - Johnson Dr. Samuel Johnson (1709-84), the author, literary Critic, poet and lexicographer of the 18th century.
 - Hampstead stage-coach—i.e., the coach running between Hampstead (now a suburb of London), and London.
 - Galileo—or Galilei (1564-1642), the Italian astronomer and physicist. He constructed his famous telescope in 1609. He was persecuted by the Roman Catholic Church because he taught the Copernican theory of astronmy, (viz., that the earth moves round the sun).

- ge 28. Sir Isambert Brunel—English Civil Engineer (1806-59). He designed the Clifton suspension bridge, and did much to develop steam navigation.
- ,, 29. Franklin-Benjamin Franklin (1706-90), the American statesman and scientist. The discovery of the Leyden jar, in 1745, led him to investigate the nature of electricity and to identify it with lightning. This led to his invention of the lightning rod.
 - Galvani—Luigi Galvani (1737-98), the Italian physiologist and anatomist. He gave his name to "galvanism," and the "galvanic" battery.
 - Marquis Worcester Edward Somerset, second Marquis of W. (1601-1667). He was interested in scientific research, and invented "an admirable way to drive up water by fire." This was an anticipation of the steam-engine.
- ,, 80. Ferguson James Ferguson (1710-76), Scottish astronomer. He lectured in London (1743) on astronomy and mechanics.
 - Dr. Black-Joseph Black (1728-99), the Scottish chemist.
 - Dr. Wollaston William Hyde Wollaston (1766-1828), English chemist and physicist. He made important discoveries in connection with platinum metals, Dalton's atomic theory, the wave theory of light, etc.
- ., 31. Stothard—Thomas Stothard (1755-1834), English painter and illustrator.
 - Wilkie-Sir David Wilkie (1785-1841), Scottish painter and etcher.
 - Bewick Thomas Bewick (1753-1828), English woodengraver. He revived the art of wood-engraving, and brought it to perfection.

- Page 31. West-Benjamin West-(1738-1829
 - A historical painter.
 - Davy-Sir Humphry Davy (1778-1829), the famous English chemist, the inventor of the Davy safety-lamp for miners.
 - ,, 32. Cuvier—Georges Leopold Cuvier (1769-1832), the French anatomist and zoologist.
 - Harvey Dr. William Harvey (1578-1657), the discoverer of the circulation of the blood,
 - Jenner-Dr. Edward Jenner (1749-1823), the discoverer of vaccination.
 - Cobbett—William Cobbett (1762-1835), English political writer and reformer. His best-known book is his Advice to Young Men (1830).

CHAPTER V.

- ., 38. Reynolds -- Sir Joshua Reynolds (1723-92) the great English portrait painter, and first President of the Royal Academy.
 - Claude Lorraine the great French landscape painter (1600-82). His real name was Claude Gelèe, but he took the name of the country, Lorraine, in which he was born.
 - Tintoretto the Italian painter, famous for his colours (1518-94). His real name was Jacopo Robusti.
 - Salvator Rosa—Italian painter, etcher and poet (1615-73).
 - Giotto Giotto di Boudone (1276-1337), one of the most eminent of the early Italian artists and architects.
 - Canova—Antonio Canova (1757-1822), the great Italian sculptor who revived the art of classic sculpture.
 - Gainsborough Thomas Gainsborough (1727-88), the English portrait and landscape painter.

- Page 39. Barry-James Barry (1741-1806), the Irish artist.
 - Maclise Daniel Maclise (1806-70), the Irish historical painter.
 - Northcote James Northcote (1746-1831), English artist.
 - Titian Tiziano Vecellio (1477-1576), the great Italian painter, especially famous for his marvellous colours.
 - Charles V-(1500-1558), the greatest European monarch in the 16th century. He was Emperor of Germany, King of Spain, ruler of the Netherlands, Sicily, Naples, and the New World.
 - " 40. Sequins -- A sequin was an Italian gold coin of the value of about 9 s. 6d. (or Rs. 7).
 - Hogarth William Hogarth (1697-1764), the founder of the British school of painting,—a great painter and engraver. Many of his pictures are humorous satires on the manners of his time.
 - ,, 43. Cornelius Nepos A Roman historian, a friend of Cicero. He wrote a collection of lives of famous persons.
 - ,, 44. Ajaxes Ajax and Achilles were Greek heroes in the siege of Troy, described by Homer in his epic poem, the Iliad.
 - Roubilliac Louis Franscois Roubilliac, the French sculptor (1695-1762). He settled in London in 1730.
 - ,, 49. Lord Mansfield William Murray, Earl of Mansfield (1705-93), the British Judge: Lord Chief Justice in 1756. In the House of Lords he was the great opponent of the elder Pitt, and was a great orator.
 - Banks Thomas Banks (1735-1805), English sculptor.
 - ,, 51. Constable John Constable (1776-1837), the great English landscape painter.

Page 52. Kemp-George Meikle Kemp (1795-1844), Scottish architect. He was drowned in the canal at Edinburgh before the Scott monument, his greatest work, was completed.

NOTES

- Roslin—near Edinburgh. Roslin Chapel is a very beautiful specimen of mediæval Gothic architecture.
- ,, 53. Scott monument the beautiful monument erected to the memory of Sir Walter Scott, the great novelist, which stands in Princes Street, Edinburgh.

CHAPTER VI

- 54. Battle Abbey The Abbey and Abbey Church, that was built at Senlac, near Hastings, in the south of England, after the battle of Hastings in 1066. The body of Harold, the Saxon King, who was killed in the battle, was buried beneath the high altar of the Abbey Church.
- , 54. Son of Sirach—the book of Ecclesiasticus, written by Jesus the son of Sirah: one of the apacryphal books, sometimes printed with the Bible.
- ". 55. "Until Blucher comes up"—a reference to the battle of Waterloo (1815), when the Duke of Wellington, with the English and Belgian forces, had to repel the attacks of Napoleon's army all day until in the afternoon they were reinforced by Blucher and his Prussians.
 - Lamennais Félicté Robert de Lamennais (1782-1854), the French philosopher.
 - Buxton-Sir Thomas Fowell Buxton (1786-1845), English philanthropist and politician. (See the end of this Chapter).
- "56. Suwarrow—(or Suvarov) Alexander Vasilievitch Suvarov (1729-1800), who rose from the ranks, and was never defeated, even by Napoleon.

Page 56. Richelieu – Armend Jean Duplessis Richelieu (1585-1642), the great French statesman, and minister of Louis XIII.

- Napoleon -- Napoleon Buonaparte (1769-1821), the famous Emperor of the French.
- ,, 57. Wellington—Arthur Wellesley, first Duke of Wellington (1769-1852), the great English general, and conqueror of Napoleon. His conduct of the Peninsular War in Spain and Portugal (1808-1814) did more than anything else to break the power of Napoleon.
- , 58. Clive—Robert Clive (1725-74), created Baron Clive of Plassey for his services in India.
 - Cromwell Oliver Cromwell (1599-1658), the famous Puritan leader and General of the parliamentary forces in the Civil War, Lord Protector from 1653-58.
 - Washington George Washington (1732-99), the first President of the United States of America.
 - Napier Sir Charles Napier (1782-1853), Enlish general, and Commander-in-Chief in India from 1849-51.
 His victory at Meanee in 1843 resulted in the annexation of Sindh.
 - 59. John Jervis British Admiral (1735-1823), created Earl St. Vincent for defeating the Spanish fleet off Cape St. Vincent in 1797.
 - Campbell Sir Colin Campbell (1792-1863), afterwards created Lord Clyde; British General, famous for his relief of Lucknow in the Mutiny (1857). He was the son of a Glasgow carpenter.
 - Henry Martyn English Missionary (1781-1812). He laboured heroically in India and Persia, and was a scholar in Oriental languages.
 - John Williams English Missionary (1796-1839). He was killed by cannibals on the island of Erromanga (the New Hebrides).
 - Livingstone David Livingstone (1813-73), Missionary, traveller and explorer. Smiles could not complete his life in his book for, when it was published

- Page 59. (1859), Livingstone's labour had only begun. He was not only one of the most devoted of missionaries and saintly of men, but also remarkable geographical explorer, who opened up a great deal of unknown Africa.
 - ., 61. Bechuanas-a tribe in South Africa.
 - Howard John Howard (1726-90), English philanthropist and prison reformer. He devoted his life to the reform of the English prison system, and got many of its abuses abolished.
 - ,, 62. Granville Sharp English philanthropist (1735-1813).

 Clarkson Thomas Clarkson (1760-1846), English philanthropist.
 - Wilberforce William Wilberforce (1759-1833), English philanthropist. He devoted many years of work in Parliament to getting the slave-trade made illegal, and it was abolished in 1807.
 - Brougham Henry, Baron Brougham and Vaux (1778-1868), British lawyer and politician. In 1830 he became Lord Chanceller, and helped to get the Reform Bill passed in 1832. He was a great advocate in Parliament of the abolition of slavery.

Barbadoes-an island in the West Indies.

- ., 66. Jamaica an island in the Wet Indies.
 - The Downs the roadstead off the East Coast of Kent, in the English Channel, where ships often lie at anchor.
 - Habeas Corpus—the Habeas Corpus Act was passed in 1679 to prevent accused prisoners being kept in jail indefinitely without trial. A writ of Habeas Corpus (which means literally, 'thou hast the body') compels the jailor to produce a prisoner before a Magistrate.
 - Spithead—a roadstead in the English Channel, between the Isle of Wight and Portsmouth.
- ,, 68. Sleuth-hound—a blood-hound used to track escaped prisoners by scent.

.ge 69. The slave trade was abolished—the Abolition Bill, declaring trading in slaves to be illegal, was passed by Parliament in 1807.

71. Not a slave, etc. - the Emancipation Bill, by which slavery was abolished in the British Colonies, was passed on August 30, 1833. The British Government paid the planters twenty million pounds as compensation for the loss of their slaves.

CHAPTER VII

- 72. Chaucer Geoffry Chaucer (13±0-1400), the English poet called, "the Father of English Poetry." His chief work was the Canterbury Tales.
- 73. Spenser Edmund Spenser (1552-99), the great English poet, contemporary of Shakespeare. His chief work was The Faery Queen.
 - Milton-John Milton (1608-74), the great English epic poet. His chief work was Paradise Lost.
 - Wordsworth William Wordsworth (1770-1850), the great English poet.
 - Scott-Sir Walter Scott (1771-1832), the Scottish novelist and poet. He is called "the father of the English historical novel."
 - Grote—George Grote (1794-1871), English politician and historian. His *History of Greece* (finished in 1856) is a classic.
 - Mill-John Stuart Mill (1806-1873), English philosopher and political economist. His Principles of Political Economy was for long the standard work on the subject.
 - Hercules—called Herakles by the Greeks, was the greatest legendery hero in Greek mythology. He was ordered by the oracle of Delphi to be the servant of Eurystheneus, King of Tiryus, who set him the twelve apparently impossible tasks to perform, called "the twelve labours."

- Page 73. Melbourne William Lamb, Viscount Melbourne (1779-1848), English statesman: Prime Minister under Queen Victoria.
 - Russell Lord John Russell, first Earl Russell (1792-1878), British statesman. Prime Minister in 1846, and in 1865.
 - Moore Thomas Moore (1779-1852), the Irish poet; author of Irish Melodies, Lalla Rookh, etc.
 - "74 Lamartine—Alphonse Morie Louis de Prat de Lamartine (1790-1869), the French poet. As a politician, he took a prominent part in the revolution of 1848. He died in poverty, due to his extravagance.
 - " 76 Ceell William Ceell, Lord Burleigh (1520-98), the great Minister of Queen Elizabeth.
 - De Witt-Jan De Witt (1625-72), the Dutch statesman. He was appointed Grand Pensionary of the Netherlands in 1653. He was murdered by an angry mob on account of the invasion of the Netherlands by Louis XIV of France's armies.
 - ,, 78 Louis XIV King of France (1638-1715).

 Dupin Audré Morie Jacques Dupin (1783-1865),

 French statesman and lawyer.
 - , 81 Chalmers Thomas Chalmers (1780-1847), the Scottish theologian and preacher.
 - .. 82 Cozened cheated.
 - Latimer—Hugh Latimer (1485-1555), appointed Bishop of Worcester in 1535. He died as a martyr at the stake in Oxford.

CHAPTER VIII

- " 84 Sterling John Sterling (1806-44), Scottish author. Carlyle wrote his biography.
 - Cobden Richard Cobden (1804-65), English statesman, and philanthropist. He fought against the

- Page 84. Corn Laws, and was the chief cause of the establishment of Free Trade in England.
 - 86. Haydon Benjamin Robert Haydon (1786-1846), English painter. He was arrested for debt in 1823; and committed suicide, being desperately in debt and in great poverty, in 1846.
 - "87. John Locke—The English philosopher (1632-1704).

 The Essay Concerning Human Understanding was his chief work.
 - " 88. Muckle-much (Scotch).
 - ., 90. Wright Thomas Wright (1789-1875), English philanthropist and prison reformer.
 - Agur's Prayer see Bible, Proverbs Chap. 30.

CHAPTER IX

- " 95. Dr. Arnold -Thomas Arnold (1795-1842), the greatest of English schoolmasters. He became Headmaster of Rugby School in 1828, and he not only made that school the first in England but, by his example, reformed the whole English public school system.
 - Elihu Burritt the American Peace Advocate (1810-1879), known as the "learned blacksmith." He learnt mathematics and languages while at his work. In 1842 he started a weekly paper, the Christian Uitizen, devoted to anti-slavery, peace, temperance and self-culture. He visited England twice to form a "League of Universal Brotherhood," to abolish war.
 - Milnes Richard Monckton Milnes (1809-85) first Lord Houghton, English author and politician.
 - Gray-Thomas Gray (1716-71), English poet: famous for his Elegy written in a country Churchyard.
 - Cumberland Richard Cumberland (1631-1718), the English theologian and philosopher. Made Bishop of Peterborough.

- Page 100. Arnauld Sophie Arnauld (1744-1802). French operatic singer, noticed for her wit and smart sayings.
 - Horner-Francis Horner (1778-1817), Scottish politician, and Member of Parliament.
 - Ignatius Loyola (1492-155), the Spanish soldier and monk, who founded the order of Jesuits.
 - Lytton—Edward George Bulwer Lytton (1803-73), made Baron Lytton in 1866,—English novelist, dramatist and politician.
 - Abernethy John Abernetby (1764-1831), eminent surgeon.
 - " 102. Pestalozzi Johann Heinrich Pestalozzi (1746-1827), the Swiss educational reformer.
 - "108. Bolingbroke—Henry St. John, Viscount Bolingbroke (1678-1751), English statesman: leader of the Tory party in the reign of Queen Anne.
 - Magna Charta the Great Charter of English libertise, which the barons forced King John to sign at Runnywede in 1215. In those days only the priests could write; and the great nobles, who could not write, had to make their mark on the document, instead of signing their names.
 - ,, 104. Richter Johann Paul Friedrich Richter (1763-1825)

 -generally known as Jean Paul, the German
 humourist and author.
 - Pythogoras the Greek Philosopher of the 6th century B. C.

CHAPTER X

- ", 106. Fox Charles James Fox (1749-1806), English statesman and parliamentary orator.
 - Horne Tooke John Horne Tooke (1736-1812), English politician.
- " 107. Moreau—Jean Victor Moreau (1761-1813), the French General, in the times of Napoleon.

- Page 109. Lord Lyndhurst-John Singleton Copley, Baron Lyndhurst (1772-1863), English lawyer, and Lord Chanceller.
 - Carissimi Giacomo Carissimi (1604-74), Italian musician and composer.
 - Henry Clay American statesman and orator (1777-1852).
 - Curran John Philpot Curran (1750-1817), the Irish orator and politician.
 - 110. Mum that is, silent.
 - Lord Eldon John Scott (1751-1838), first Lord Eldon: appointed Lord Chanceller of England in 1801.
 - Murray Alexander Murray (1775-1813), the Scottish philologist, Professors of Oriental languages, Edinburgh University.
 - Shorter Catechism -the Catechism authorised (1648) for the Scotch Presbyterian Church. It is a clear statement of Calvinist doctrines. A catechism is a treatise drawn up for teaching purposes in the form of question and answer.
 - Chambers William Chambers (1800-83), Scottish Publisher.
 - " 112. Leyden John Leyden (1775-1811), Scottish poet and linguist. He helped Scott in the preparation of the Border Minstrelsy, a collection of Scotch songs.
 - Hogg -James Hogg (1770-1835), Scottish poet and essayist. Called the "Ettrick Shepherd."
 - Cairns John Cairns (1818-92), Scottish Presbyterian Minister, and Principal of the UnitedPresbyterian Theological College, Edinburgh.
 - Constable Archibald Constable (1774-1827), publisher, of Edinburgh.

- Page 112. Spelman Sir Henry Spelman (1564-1641), English historian and antiquary.
 - Dryden -- John Dryden (1631-1700), the English poet and dramatist.
 - Boccaccio Giovonni Boccaccio (1313-1375), the Italian writer, most famous for his collection of tales called *The Decameron*.
 - Alfieri Vittorio, Count Alfieri (1749-1803), Italian poet and dramatist.
 - "114. Niebuhr -- Karsten Niebuhr (1733-1815), German author and traveller.
 - Hall—Robert Hall (1764-1831), English Baptist minister.
 - Dante—Dante Alighieri (1265-1321), the greatest poet of Italy, specially famous for his Divina Commedia.
 - Handel—George Frederick Handel (1685-1759), the great musician and composer. After 1711 he settled in England, and produced his great oratories—The Messiah. etc.
 - ., 115. Barrow—Isaac Rarrow (1630-77), English divine and mathematician—Vice-Chanceller of Oxford University in 1675.
 - Clarke Adam Clarke (1702-1832), Wesleyan preacher and theologian.
 - Swift Jonathan Swift (1667-1745), Irish satirist, author of the Tale of a Tub, Gulliver's Travels, etc. He became Dean of St. Patrick's, Dublin.
 - Dr. Cook Frederick Charles Cook (1810-89), English preacher, theologian and religious writer.

CHAPTER XI

Page 116 Canning—George Canning (1770-1827), English statesman. He was Foreign Secretary from 1822, and for four months Prime Minister.

Page 117 Sydney Smith—English author and wit (1771-1845), Canon of St. Paul's in 1831.

- Lord Cockburn Lord Henry Thomas Cockburn (1779-1854), Scottish lawyer: made a judge in 1834.
- " 118 Disraeli—Benjamin Disraeli, Earl of Beaconsfield (1804-1881), politician, novelist, and Prime Minister of England.
- Page 120 "Train up, etc."—See Bible, Proverbs, Ch. 22, vers. 6.

 Lord Collingwood—Lord Cuthbert Collingwood
 (1750-1810), British Admiral; great friend of
 Nelson, and second in command to Nelson in the
 battle of Trafalgar (1805).
 - ,, 121 Lady Montague -Lady Mary Wortley Montague (1689-1762), English authoress, daughter of the Earl of Kingston.
 - Puppyism—A conceited young man is often called a "Puppy."

Navvy--Common labourer.

- ,, 123 The battle of Assaye—in which Sir Arthur Wellesley (afterwards Duke of Wellington) defeated Sindhia in the Mahratta war in 1803.
 - The Psalmist, etc.—See Bible, Psalm 15, 2.
- ,, 125 Feu de joie-a discharge of fire-arms by way of public rejoicing or salute. The rifles are fired one after another in rapid succession.
 - Fuller—Thomas Fuller (1608-61), English preacher, wit and author.
 - Drake—Sir Francis Drake (1540-96), the famous naval commander and "sea-dog" of the times of Oueen Elizabeth.